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A Study in the Philosophy
of Bergson

A STUDY
IN THE
PHILOSOPHY OF BERGSON

BY

GUSTAVUS WATTS CUNNINGHAM, A.M., PH.D.

GEORGE NYE AND ANNE WALKER BOARDMAN PROFESSOR OF PHILOSOPHY,
MIDDLEBURY COLLEGE

LONGMANS, GREEN AND CO.
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PREFACE

IN recent years much has been written concerning the philosophy of M. Bergson. The philosophical journals have been crowded with articles dealing with one phase or another of the 'new' philosophy, while the presses of both this country and Europe have sent forth book after book expounding, elaborating, or criticizing the views of the French thinker. It would seem appropriate, therefore, that another essay in the midst of this flood of literature bear in its preface a word in justification of its appearance.

The reason why this unpretentious volume has been written and published is simply this. The very popularity of Bergson's views, as evidenced by the discussion which they have aroused, is sufficient indication of the fact that they must perforce be taken into serious account by contemporary workers in the philosophical field. Particularly is it incumbent upon those who, like the present writer, find themselves holding views which are radically different from what at first glance would seem to be the doctrine so forcefully and eloquently set forth by the author of *L'Évolution Créatrice*,

to come to grips with this new theory and to measure their views in the light of the suggestions which it presents. The present study is the result of the writer's efforts to do just this. It is sent out to the public in the hope that it may, to some extent at least, aid in the clarification of some of the issues involved in Bergsonism and also—if so bold a statement be permitted—in the exposure of what to many would seem to be errors which the new philosophy threatens to perpetuate.

In order to prevent a possible misconception of this study, let it be said at once that it is a critique and not a summary. Consequently the writer has not hesitated to pass by many interesting phases of Bergson's thought and to confine his attention to what he regards as his author's basic doctrine. It will not be surprising, therefore, if the reader finds that certain views which he has been accustomed to associate with Bergson's name are touched upon only incidentally, if at all, while other matters which may have seemed to him of small import loom large in the discussion. The aim of the writer has been to fix attention exclusively upon the method of the new philosophy and the conception of reality which that method implies. The effort has persistently been made to focus debate upon the fundamentals and to avoid obscuring the issue by the introduction of what might perhaps be regarded as more or less irrelevant details. What the discussion lacks in comprehensiveness will thus, it is

hoped, be atoned for by continuity and definiteness. If the reader, when he shall have completed the book, feels that at least one problem of fundamental importance not only in the philosophy of Bergson but also in the philosophical field generally has been raised and an answer to it, contrary to the letter but perhaps in harmony with the spirit of Bergson's own views and also in harmony with the main line of the development of modern epistemological theory, suggested, the book will not have wholly failed of its purpose. It is, of course, gratuitous to add that, so far as the writer has been able to make it so, the criticism which the study undertakes is constructive.

The substance of the chapters dealing with duration and finality has already appeared in the form of articles in *The Philosophical Review*, Vol. XXIII. I wish to express to the Editor of that journal my appreciation of his kind permission to present here the same material in a somewhat altered and expanded form. Since the English translations of the author's principal works have received his personal approval, their text and pagination are made use of in connection with the references and quotations which concern those works.

My study of M. Bergson's works has been a source of many thought-provoking suggestions, and it is a genuine pleasure to me to make acknowledgment of the fact. I do not exaggerate when I say that my own philosophical outlook is materially

different from what it was before I undertook a systematic investigation of his brilliant writings. I make this confession all the more gladly, since I have been compelled in the pages which follow to state as vigorously as I might my disagreement with much of what he has written. Students of philosophy by no means always derive the greatest assistance from those with whose opinions they find themselves in full accord. My colleague, Professor Vernon C. Harrington, of the English Department of Middlebury College, has read the entire work in manuscript, and I wish here to express my appreciation of his interest, encouragement and helpful criticism. I am also deeply indebted to Professor J. E. Creighton, of the Sage School of Philosophy of Cornell University, for many valuable suggestions. My friend and pupil, Mr. C. H. Wright, has very kindly assisted in the arduous task of verifying the numerous quotations and references.

In conclusion, I desire to place on record my sincere gratitude to Viscount Haldane for the encouragement and inspiration which I have received from correspondence with him during the course of this study. While he is in no way responsible for any opinion which finds expression in the work, I nevertheless feel that the success of my efforts, whatever measure of success may perchance have attended them, is in no small degree due to him and to the sympathetic interest he has manifested

in a former work of mine. Indeed, apart from a remark made by him apropos of that work concerning the inadequacy of the Bergsonian point of view and the necessity of supplementing it by bringing it into harmony with the fundamentals of intellectualism, I am not at all sure that the present argument would have taken tangible shape.

G. W. C.

MIDDLEBURY, VERMONT,
March, 1916.

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A STUDY
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CHAPTER I

INTRODUCTION

IN the introductory lecture of the series of lectures delivered at Manchester College in 1909, Professor James, surveying the situation in the philosophical field, lamented the fact that the tendency then prevailing in philosophical discussion was to link philosophical debate with an account of the historical development of the problems of philosophy; and he felt called upon to utter a word of warning against such a method of philosophizing which seemed to him exceedingly barren of results. He insisted that this method of procedure robbed the views of contemporary thinkers of all freshness and originality; and this, of course, he deplored. "You must tie your opinion to Aristotle's or Spinoza's; you must define it by its distance from Kant's; you must refute your rival's view by identifying it with Protagoras's. Thus does all spontaneity of

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thought, all freshness of conception, get destroyed. Everything you touch is shopworn. The over-technicality and consequent dreariness of the younger disciples at our american universities is appalling. It comes from too much following of german models and manners. Let me fervently express the hope," he continues in appeal to his English audience, "that in this country you will hark back to the more humane english tradition. American students have to regain direct relations with our subject by painful individual effort in later life. Some of us have done so. Some of the younger ones, I fear, never will, so strong are the professional shop-habits already."¹

Had Professor James been writing in the present year of grace, he would hardly have been so pessimistic concerning the situation. At present, one cannot but strongly feel, the current is setting in the contrary direction. It is apparently becoming the fashion nowadays, in the discussion of philosophical problems, to dispense with any detailed consideration of their connection with the past growth of philosophical theory. One no longer feels under very pressing obligation to tie one's opinions to Aristotle's or Spinoza's or to measure one's views in the light which the Critical Philosophy might perchance throw upon them. One is much more apt to feel that the way to truth is around Kant, not through him; that the older philosophers have only

¹ *A Pluralistic Universe*, pp. 16-17.

muddied the waters and so hid from view truths which ought to be, and otherwise would be, within easy grasp. The sublime indifference of some contemporary speculation to the opinions of Aristotle, Spinoza and Kant is marked enough to rejoice the heart of even Professor James himself, were he only amongst us to behold it: the younger generation of thinkers is breaking away from the ‘professional shop-habits’ much more readily than he had dared hope in 1909 was possible. The ancient tradition threatens to pass away; behold, all things, particularly philosophical theories, are becoming new. Novelty promises to become at last a word to conjure with.

This unhistorical attitude is at least marked enough at present to throw upon one who dares to cling to the notion that the study of the historical development of philosophical problems is of genuine importance in the effort to deal critically with those problems the necessity of justifying the faith that is in him. He does not wish to be accused of contenting himself with the valueless exercise of sifting once again the already much-turned ashes of the dead and dusty past; and yet that is the charge that is likely to be brought against him. “When I read recent transcendentalist literature,” says Professor James later on in the same series of lectures, “I get nothing but a sort of marking of time, champing of jaws, pawing of the ground, and resettling into the same attitude, like a weary horse

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in a stall with an empty manger. It is but turning over the same few threadbare categories, bringing the same objections, and urging the same answers and solutions, with never a new fact or a new horizon coming into sight.”¹ What, then, is the poor ‘transcendentalist’ to do? All that he can do, I presume, all that he need do, is to raise the question whether his method of philosophizing is so amazingly empty and impotent. If he discovers it to be so, then by all means let him forsake it and turn to something else which has more body and warmth about it. I wish to raise here and briefly discuss the question whether or not ‘tying one’s views to Aristotle’s and Spinoza’s and measuring them by their distance from Kant’s’ is, after all, an altogether fruitless undertaking, a piece of ‘vicious intellectualism.’ The bearing of our discussion of this question upon the main purpose of the present essay will be clearer as we proceed.

In the first place, let it be frankly admitted that there is a very great truth in the position for which Professor James pleads. Certainly it must be granted that philosophy is more than the history of philosophy, and that to philosophize one must do more than repeat with variations what the thinkers of the past have thought and written. If philosophy is to advance, if its problems are to be solved, indeed if its problems are to have any vital interest, then its devotees cannot be merely

¹ *Op. cit.*, p. 265.

servile purveyors of the wares of the ancients. Philosophers tried this once, and the result was the barren and abstract system of the Schoolmen. Presumably no one nowadays is interested to build up another Scholasticism. There must be spontaneity of thought, there must be originality of conception, or philosophy, technical philosophy, will sink back to a dead level and stagnate.

But there is such a thing as over-emphasizing a truth and so converting it into an error. Independence of thought in philosophical debate is essential, it is the breath of life to the philosophical spirit. But, at the same time, there lurks a danger in the effort to be too independent. After all is said, it must be admitted that there are some things more desirable in philosophy than mere originality. It not infrequently is the case that originality itself must be evaluated; in fact, from one point of view it is true that the growth of philosophy consists just in the evaluation of originality. The contention of the present argument is that such evaluation is possible only in terms of the history of philosophy itself: geniuses stand shoulder to shoulder, while fools and pedants are dwarfed by their side.

The very first argument that occurs to me in connection with the question before us discloses, I presume, the intellectual astigmatism which is reputed to be a characteristic defect of all those who have been brought up under the unhealthful environment of ‘intellectualistic’ tradition. For the first

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suggestion that comes to me is an *a priori* consideration. And that consideration—to go forward with the matter in hand—is that the history of philosophy is just the record of the attempts which various thinkers have made to solve essentially the same problems that confront us at present. I fancy it would be rather difficult to point out any current philosophical problem which was not in some genuine sense a problem for Plato and Aristotle. Certainly it is true that, when we pass Descartes, we find ourselves in direct contact with thinkers whose problems are identical with ours; in fact, it was largely they who created our problems for us. Tell off your problems: pluralism and monism, discreetness and continuity, good and evil, matter and mind, transcendence and immanence, the temporal and the eternal, thought and will, mechanism and teleology, the whole and its parts, reality and appearance, error and truth, independence and the ego-centric predicament—have not all of these been discussed in the books of the thinkers of the past? The thinkers of yesterday wrestled with the very problems that disturb our tranquillity of soul. But if this consideration is true, we must perforce make an effort to come to terms with the views these thinkers have expressed. Those who insist most vigorously upon cutting loose from tradition and treating our own problems in our own original way also feel the importance of attempting to come to some sort of understanding among ourselves as

to what we agree upon and wherein we disagree. But why stop with ourselves? Why extend the courtesy to the living only? Why not take into our confidence the thinkers of the past also, and try to discover what light they may perchance be able to throw on the difficulties which they, like ourselves, have had to meet? Like science, philosophy is an essentially social affair and there seems to be no good reason why one generation of thinkers should exclude another from the charmed circle. On the contrary, there is every reason to assert that such procedure is purely arbitrary and without justification. Of course, there is always the difficulty of interpreting the meaning of the classical systems, and this difficulty has to be overcome. But exactly the same difficulty confronts us when an effort is made to arrive at an appreciation of the views of contemporaries. And the difficulty in the former case is certainly no greater than it is in the latter. Indeed, if the truth must be said, there is good ground for holding the position that the task of interpreting the classics is less formidable than that of epitomizing the contributions which contemporary writers are making to our journals. Certainly it is no exaggeration to say that, compared with current philosophical literature, the classics do not suffer from the point of view either of content or of lucidity of expression. The classics are as important as the journals, they deal with substantially the same problems,

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and they lend themselves as readily to interpretation.

I do not wish to be misunderstood here. Of course, it is far from my thought to bring the charge that there is nothing of any importance being done at present in the philosophical field. Nor do I have any intention of complaining that the contributions of contemporary thinkers to the journals are unintelligible. If such were my feeling, naturally my own incapacity would be sufficient explanation of the darkness in which I were engulfed. All I am urging is that on the whole it is as easy to interpret the classics as it is to interpret the products of contemporary writers, that the classical philosophers have something to say which is at least as important as anything that is being said by contemporary writers, and that what they have to say has a more or less direct bearing upon the various problems with which contemporary writers are most concerned.

If it be objected here that the problems with which the thinkers of the past dealt are not our problems at present, a question is at once raised which it is not possible to answer apart from a consideration of the way in which the problems of the present have been generated. How do scientific problems grow? How does reason develop? To such questions I can see but one answer. Reason develops by linking the past with the present, by joining the old with the new and so transforming

the old. Both in the individual and in the race the development of reason consists essentially in bringing new facts under old conceptions or theories and revising the theories in consequence. The Copernican theory of the solar system is only a revision of the theory which it superseded, and that, too, despite the fact that the two theories are in some respects antithetical; the present theory of evolution is just the Darwinian theory revised in the light of more extensive observations. Scientific problems are intricately connected, the new with the old; the death of the old is just the birth of the new. The old theories are, thus, of supreme importance in the generation of problems; indeed, without these old conceptions there would be no problems, for mere brute facts are of no rational significance. None of our problems, therefore, assuredly none of our strictly scientific problems, are sharply disconnected from the past; it is rather out of the past that they spring, and it is, consequently, largely in terms of the past that they must be comprehended and defined. To be sure, every problem is in some sense novel and unique, but it is not merely novel and unique; it has had a history, and that history is identical with itself. The scientist tries to deal with his problem in an original manner, unencumbered with any matters of mere tradition; but, if he does not deceive himself, he realizes that his original contributions to his science are valuable just in proportion as they fulfil the

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traditions of his science. His hypotheses must not contradict the known laws of his science; they can at most force a revision and redefinition of them. The true scientist comes to fulfil, not to destroy or make wholly new.

This is as true of the philosopher as it is of the scientist, and for precisely the same reason. Like science, philosophy is a growth; for, like science, it is the result of the efforts which the mind of man makes to interpret its world. And the problems of philosophy, like the problems of science, are organic with the past; they can be intelligently defined and adequately comprehended only in the light of their history. They are the problems which the past has created and handed down to the present, and therefore they do not belong exclusively to the present; in some sense they always must be old. To be sure, our problems are ours and our solutions must also be ours, but they are not ours alone. If it be true that human reason did not die with the past, it is equally true that it did not spring full-blown into being with the present generation; much of the wisdom of the world breathes through the spirit of "the sovereign dead of old." Philosophy, like science, is an evolution; and the true philosopher, like the true scientist, comes to fulfil and not to create *de novo*.

And from this I should conclude that the study of the history of philosophy is of real significance for the philosopher; that if one would philosophize

intelligently, one must perforce take the backward look. As Hegel has well said: "The history of philosophy, in its true meaning, deals not with a past, but with an eternal and veritable present: and, in its results, resembles not a museum of the aberrations of the human intellect, but a Pantheon of Godlike figures."¹ We cannot do otherwise than tie our opinions to Aristotle's and Spinoza's; the distance from Kant is never so great that there is no demand upon us to view our philosophical faith in the light of the Critical Philosophy. The great thinkers of bygone days are with us still and they still continue, and will continue, to press their claims upon us; their problems, at least many of them, are our problems and their reason is likewise ours. If we neglect to come to an understanding with them, if we leave them wholly out of the reckoning when making up our minds, we do so to our own irreparable loss and ultimately, one is compelled to add, to our own confusion.

But one who ventures to hold the position here suggested is not limited to *a priori* considerations alone in justification of his views. He is at liberty to point to the undeniable fact that the more prominent new philosophies at present before the public actually have their roots deep in tradition. The advocates of the new points of view are constantly suggesting their agreement or disagreement with the classical systems and defining the meaning of their

¹ *Enc.*, section 86.

problems in terms of historical tradition. Take away from these new philosophies their polemic against the systems of the past, and you rob them of much of their content; their controversies with the classical philosophers are essential to the definition of their point of view. Not only is the backward look theoretically necessary, it is in practice actual. Professor James himself contended that the so-called 'new' theory of truth which in these latter days got for itself the name of Pragmatism was only a new name for an old way of thinking—as old as the Greeks. "Socrates was an adept at it. Aristotle used it methodically. Locke, Berkeley, and Hume made momentous contributions to truth by its means."¹ In order even to understand the meaning of the 'new' realism one must devote oneself to a diligent study of Berkeley's *Principles*, of which the new movement is avowedly the uncompromising foe. The *philosophie nouvelle* of M. Bergson is no exception to the rule; on the contrary, it is an admirable example of it. This philosophy is new: about this there need be no dispute. There is here no vain repetition of 'threadbare categories' nor an impotent and restless 'pawing of the ground.' "Open Bergson, and new horizons loom on every page you read. It is like the breath of the morning and the song of birds. It tells of reality itself, instead of merely reiterating what dusty-minded professors have written about what

¹ *Pragmatism*, p. 50.

other previous professors have thought. Nothing in Bergson is shopworn or at second hand".¹ And yet Bergson's views are not in any sense disconnected from the historical development of scientific and philosophical theory; they are, rather, vitally bound up with that development. The student of the *Creative Evolution* knows this full well. Without Plato, Aristotle, Plotinus, Galileo, Kant, Darwin, Spencer, and a host of other 'previous professors,' the Bergson who created the philosophy of change could not have been. These thinkers of the past exert in his work a determining influence apart from which Bergsonism as it is at present defined would have been impossible. And Bergson himself would, of course, be the last to renounce the debt which he so obviously owes to these his predecessors. For better or for worse, then—other examples might be given—it would seem that the philosophical enterprise, however novel it may suppose itself to be, is, in point of actual fact, indissolubly linked with the past.

Why should this be? To this inevitable question I can see no satisfactory answer other than the one suggested by the discussion above. The development of philosophical theory is an organic development, a continuous and unbroken development, whose past is always the source from which its present springs. In a very important sense it is true that the process of the generation of phil-

¹ James, *A Pluralistic Universe*, p. 265.

osophical problems is identical with those problems themselves; certainly it is true that if one is to appreciate the full significance of philosophical problems and discern the basic implications of them one must understand, at least in outline, the history of their origin and growth, one must study the definitions and revisions to which they have been subjected by the thinkers who have been instrumental in creating them. Indeed, the very statement of philosophical problems implies their history; taken apart from their genetic context the profoundest and most persistent problems may sound flippant or even absurd in their statement. "Whoever, e.g., hears the assertion: everything which I see, the starry heavens above me, the houses, the fields, the trees about me, all these are only my idea, they exist only as I perceive them, and only as my perception, will at first be disposed to regard such a view as insane. A knowledge of the historical origin of pure idealism, however, makes it perfectly clear to every one. A critical attitude towards this problem . . . is impossible without a full knowledge of its history."¹ And the same, we may generalize, is substantially true of all philosophical problems. Jerusalem is right: "An acquaintance with the chief data of the history of philosophy is an indispensable prerequisite for the understanding of philosophic problems."² And this

¹ Jerusalem, *Introduction to Philosophy*, Eng. trans., p. 21.

² *Ibid.*

is so—so at least, I am convinced, we must assume—because that reason which creates philosophy is objective and social rather than subjective and individual.

I have deemed it worth while to present at such considerable length these simple—one might indeed be tempted to call them trite—observations, because the point of view here suggested is the one which has determined the whole course of the present essay. I do not assume that anything thus far said will instruct the reader; my aim has been merely to present—what he certainly has a right to know—the prejudice which has entered into the study he is asked to pursue, and some of the reasons for that prejudice. So, if the reader is disposed to agree with little or nothing that is said above, or if, on the other hand, he is disposed to look upon the remarks as obvious commonplaces, he at least has become acquainted with the writer's assumptions and, by implication, the main purpose of the present argument. For the above considerations have driven me to the conclusion that, in order to successfully criticize philosophical doctrines and systems, the critic must to the extent of his ability and with all diligence connect what he has to say with that portion of the data of the history of philosophy relevant to the problems with which he is dealing. The only safe and sane method of evaluating philosophical views, I have been compelled to believe, is to consider them in their genetic context. If

it is true that a philosopher can hardly spin out of his consciousness, unillumined by the fires outside of his own soul, anything that is of tremendous import for the world at large, his critic must consider the necessity that holds him bound; if every Aristotle must have his Plato and every Kant his Hume, the critic cannot overlook this fact and at the same time say something of great value. The attempt to judge a philosophy in its isolation, even though that philosophy claims to be nothing more than a method, is a fruitless, I had thought to say a dangerous, undertaking. To get anything like a true view one must see the perspective and read the context; only when this is done may the critic dare hope that his words of praise or condemnation are perchance something more than merely the expression of his own idols of the cave. At any rate, this is the writer's firm conviction, and what has been said hitherto is in explanation of it. And it is the conviction which he has tried to apply—how poorly he is deeply conscious—in the pages which follow.

CHAPTER II

THE INTUITIVE METHOD

IN the estimation of its author Bergsonism is nothing more than a method, and it must be understood and criticized as such. It is not a clear-cut and finished system; indeed it is not a system at all in the ordinary meaning of the term. It is rather a point of view which must be filled out and completed as the possibilities of its application and the principles involved in it are gradually disclosed by the further development of experience. It must therefore be the product of collaboration, and cannot be made in a day. "Unlike the philosophical systems properly so called, each of which was the individual work of a man of genius and sprang up as a whole, to be taken or left, it will only be built up by the collective and progressive effort of many thinkers, of many observers also, completing, correcting and improving one another."¹ All that Bergson hopes to do, all that he believes it is possible for any one thinker at present to do, is simply to define the method, the outlook, of the new philosophy and to suggest some of the directions in which it may be applied and some of the results which follow from its

¹ *Creative Evolution*, p. xiv.

application. The problem of the *method* of Bergsonism is thus the basic problem so far as the theory has at present developed. Our aim in the present chapter is to become acquainted with the general nature of the method which the new philosophy insists upon.

I

The natural method of philosophy is the method of the intellect. This is the method which philosophers have employed from the beginning. And it is the method which the latest evolutionist philosophy would urge us to accept. This evolutionist philosophy "begins by showing us in the intellect a local effect of evolution, a flame, perhaps accidental, which lights up the coming and going of living beings in the narrow passage open to their action; and lo! forgetting what it has just told us, it makes of this lantern glimmering in a tunnel a Sun which can illuminate the world. Boldly it proceeds, with the powers of conceptual thought alone, to the ideal reconstruction of all things, even of life."¹ The method of the intellect is ingrained in human nature; it is the method which the mind of man hitherto has followed. What have been the results of this method?

Among the Greeks it issued in the doctrine of Ideas, the basic principle of which is that the immutable and static alone is real. "Beneath the

¹ *Op. cit.*, pp. x-xi.

qualitative becoming, beneath the evolutionary becoming, beneath the extensive becoming, the mind must seek that which defies change, the definable quality, the form or essence, the end. Such was the fundamental principle of the philosophy which developed throughout the classic age, the philosophy of Forms, or, to use a term more akin to the Greek, the philosophy of Ideas.”¹ This is the philosophy of Parmenides and the Eleatics, of Plato and the Academicians, of Aristotle and the Peripatetics. The philosophy of Ideas is the quintessence of the whole of Greek philosophy. “If everything that has come from poetry, religion, social life and a still rudimentary physics and biology be removed from it, if we take away all the light material that may have been used in the construction of the stately building, a solid framework remains, and this framework marks out the main lines of a metaphysic which is, we believe, the natural metaphysic of the human intellect.”² In fact, everything the Greeks worked out in the strictly philosophical field follows inevitably from their implicit confidence in the method of the intellect; and even to-day by philosophizing in this manner we might construct their general systems purely *a priori*. The static only is real, Being is one continuous one in eternal repose,—such is the general conclusion to which the intellectual method led the Greeks.

¹ *Op. cit.*, p. 314.

² *Ibid.*, p. 326.

Modern science has been built up, at least so far as its method is concerned, largely around the discoveries of two men, Galileo and Kepler. The method which these men followed has become a sort of model for science in general; and their method is the intellectual method. Both measure motion in mathematical terms. Galileo connects the space traversed by a falling body with the time occupied by the fall: Kepler defines the motion of the planets in terms of the relation between the areas described by the radius-vector and the time consumed in describing those areas. But both look upon time as an independent variable. This is inevitable because of the intellectual method which they employ. It is a very efficient method so far as physics and astronomy are concerned; it brought these pioneers, as it has brought others since their day, face to face with some very important characteristics of the material order. But it reduces motion to immobilities, and persistently overlooks the pulsation of reality; the fluidity of real time it breaks into instants and fixes in spatial molds.

Modern philosophy has permitted science to impose upon it the intellectual method. It is true that some of the modern philosophers have occasionally shown a disposition to depart from the intellectual method of science and to launch out upon an independent voyage of discovery; but they have on the whole remained faithful to the old point of view. "An irresistible attraction brings

the intellect back to its natural 'movement, and the metaphysic of the moderns to the general conclusions of the Greek metaphysic."¹ The trail of the serpent is over the works of Descartes, Leibnitz, and Spinoza alike. Descartes hesitated before committing himself to the cinematographical method of the intellect; but at the last he went in the general direction of mechanism, and the die was cast. Spinoza and Leibnitz poured into their doctrines "the whole content of their souls, rich with the inventions of their genius and the acquisitions of modern thought. And there are in each of them, especially in Spinoza, flashes of intuition that break through the system. But if we leave out of the two doctrines what breathes life into them, if we retain the skeleton only, we have before us the very picture of Platonism and Aristotelianism seen through Cartesian mechanism. They present to us a systematization of the new physics, constructed on the model of the ancient metaphysics."² There is here, then, no advancement; the method employed by the moderns, being the same as that employed by the ancients, leads to precisely the same conclusions. In Descartes, Spinoza and Leibnitz we have the doctrine of Ideas over again with minor additions derived from modern thought.

Kant, like Descartes, was inclined to call in question the ultimate value of the intellectual method.

¹ *Op. cit.*, p. 329.

² *Ibid.*, p. 347.

His criticism emphasized the 'essential element' of Cartesianism, which had been wholly neglected by the Cartesians and largely even by Descartes himself, and thus pointed in the direction of a revivified Cartesianism. The Critical Philosophy tends to hold the view that knowledge cannot be resolved entirely into terms of intelligence. It intimates that the physics of Galileo and Kepler is not indefinitely extensible, that the physical method is not the only method of knowledge. But Kant does not go very far in this direction. He ultimately slips back into the assumption that there is only one experience, an experience of only one direction, and that intelligence covers its entire ground. The method of the intellect is thus finally accepted by him in spite of his misgivings concerning its ontological efficiency. As a result he is brought to the vicious doctrine of the thing-in-itself which lies in a realm that is not open to knowledge because it is trans-experiential. This saves him from mechanism, but it does so at the expense of limiting knowledge to the merely phenomenal and of placing reality beyond the possibility of acquaintance with it.

The successors of Kant pursue the same evil way, and end ultimately in essentially the same predicament. They do indeed oppose the mechanistic theory and deny the possibility of the unlimited application of the mechanistic point of view. But they do this only in a half-hearted manner; they still adhere to the notion that experience is of one

piece, and can be comprehended and defined in purely intellectualistic terms. "The post-Kantian philosophy, severe as it may have been on the mechanistic theories, accepts from mechanism the idea of a science that is one and the same for all kinds of reality. And it is nearer to mechanism than it imagines; for though, in the consideration of matter, of life and of thought, it replaces the successive degrees of complexity that mechanism supposed by degrees of the realization of an Idea or by degrees of the objectification of a Will, it still speaks of degrees, and these degrees are those of a scale which Being traverses in a single direction. In short, it makes out the same articulations in nature that mechanism does. Of mechanism it retains the whole design; it merely gives it a different coloring."¹

II

Thus it happens that at the present moment philosophy is tied down to the method of the intellect. This method the present has received as a heritage from the past. It has been imposed upon us by Plato and Aristotle, by Galileo and Kepler, by Kant and the post-Kantians. Everything we try to comprehend we are prone to force into intellectual molds; every problem that presents itself to our minds must perforce shape itself in intellec-

¹ *Op. cit.*, p. 362. It is significant that Bergson lumps the post-Kantian philosophers together and speaks of them in such vague terms.

tual fashion. The intellectual method is the natural method of the mind,—a method developed and strengthened by more than two thousand years of philosophical and scientific endeavor. It is not surprising, therefore, that we should find this tendency grown into a habit the yoke of which is exceedingly difficult to throw off. Professor James is right: the ‘shop-habits’ hold us bound.

But if we would penetrate into the heart of things, Bergson thinks, this habit of the mind must be broken and our age-old training explicitly renounced. For reality is flowing, galloping, sinuous, enduring. In the realm of the real there are no generalities, no concepts, no immobility. There you are confronted only by fluidity and change, and not by that which flows and changes; there you have to do with duration itself, not with that which endures. There you do not find things, but only actions. The real is unceasing life, spontaneous action, pure duration, freedom. With this reality intelligence cannot deal; its windings the intellect is unable to follow. For the intellectual method is the method of construction and leads us only to higher and higher generalities; it cannot, therefore, enter into the mobility of the real and grasp it. The intellectual method is the cinematographical method and gives us snapshots, immobile pictures, of the never-ceasing stream; it cannot dive into this stream and pursue it in all of its sinuosities. The intellectual method creates concepts to play with them

like counters; it cannot, therefore, be expected to penetrate the innermost essence of the individual object and disclose the heart of its individuality. The method of construction avails nothing here; snapshots do not reproduce the mobility and pulsation of it all; concepts cannot fathom the enduring. Realism as an ontological theory is out of date; only nominalism remains. As Kant justly observed, unaided intelligence is incompetent to penetrate beneath the surface of matter and bring to light its genuine substantiality. The intellect cannot do more than go around its object, viewing it now from this side and now from that, describing in an external manner one after another of its characteristics; at the last, intelligence is forced to confess itself defeated in its endeavor to unravel the mystery of the object's being.

Of course, Bergson does not hold the view that the intellect does not touch reality at all. He is not willing to follow Kant in the position that intelligence is limited to the phenomenal merely, while the noumenal is wholly beyond its ken. He contends that in some sense matter is real; it is the inverse movement of life, the reverse side of the flowing stream of duration.¹ And intelligence is

¹ Bergson's conception of matter and its relation to the mobility of life is to me a very puzzling conception. To say that matter is the 'extension' of the 'detension' of the 'tension' of life certainly does not solve the problem. One desires to know why life, whose very essence is tension, should feel called upon to 'detend,' and why the detension should so obligingly 'extend' itself in space. Nor

pre-eminently fitted to deal with matter; indeed, it would seem that matter is somehow the work of intelligence which solidifies the mobility of life and fixes it in spatial molds. What Bergson is chiefly concerned to deny is that reality in its fulness is comprehensible in terms of intellectual knowledge, Intelligence, he admits, is efficient, even in some sense ontologically efficient, but only partly so. It is a mistake—as he thinks the history of philosophy abundantly shows, a serious, a fatal mistake,—to assume that the intellectual method is capable of adequately seizing the real and of disclosing its total nature. Into the innermost essence of matter, back into the vital impulse whence the material universe springs, the intellect simply cannot carry us. If we depend upon intelligence to lead us beyond the spatial, the material, the static, we are putting our dependence in a broken reed.

does it help us very much to learn that reality is such that, in making itself, it unmakes itself. There seems to be some sort of contradiction here. Dr. Carr's analogy of the germ and its development (*The Philosophy of Change*, p. 172) does not make the matter clear. One can imagine that one sees how the germ—if you neglect its materiality: but why?—is analogous to the vital impulse. But how, in the development of the germ, “we have the analogy of the movement in the inverse direction which we call matter” is certainly not clear. If you neglect the material conditions in the development of the germ, it would seem that what you have as a result would be simply more life. But perhaps all of this is plain to intuition.

III

Intelligence must, then, be supplemented by another form or type of knowledge. We need a new method of comprehension which will bring us into direct touch with the vital impetus and which will enable us to deal with the tension of reality. And this is the method which the new philosophy undertakes to define for us; it is the method of intuition. Consciousness must turn from its natural bent and strive to *see* as well as understand, sympathize with, as well as construct, the universe which has produced it. "We must give up the method of *construction*, which was that of Kant's successors. We must appeal to experience—an experience purified, or, in other words, released, where necessary, from the molds that our intellect has formed in the degree and proportion of the progress of our action on things. An experience of this kind is not a non-temporal experience. It only seeks, beyond the spatialized time in which we believe we see continual rearrangements between the parts, that concrete duration in which a radical recasting of the whole is always going on. It follows the real in all its sinuosities. It does not lead us, like the method of construction, to higher and higher generalities —piled-up stories of a magnificent building. . . . It is the detail of the real, and no longer only the whole in a lump, that it claims to illumine."¹

¹ *Creative Evolution*, pp. 362-363.

Thus we are brought to the conclusion that there are two types of knowledge, namely, that of intelligence and that of intuition. And these would seem to be radically different in kind, not merely two degrees of one and the same kind. Intuition appears to be both genetically and functionally different from intelligence. From the standpoint of genesis the difference is marked: "On the side of intuition, consciousness found itself so restricted by its envelope that intuition had to shrink into instinct, that is, to embrace only the very small portion of life that interested it; and this it embraces only in the dark, touching it while hardly seeing it. On this side, the horizon was soon shut out. On the contrary, consciousness, in shaping itself into intelligence, that is to say in concentrating itself at first on matter, seems to externalize itself in relation to itself; but, just because it adapts itself thereby to objects from without, it succeeds in moving among them and in evading the barriers they oppose to it, thus opening to itself an unlimited field."¹ And even when intelligence turns inward on itself and awakens the potentialities of the intuition which, in spite of the pre-eminent development of the intellect, still slumbers in consciousness, the revivified faculty is very different in function. Intelligence deals with matter, the extension of life: intuition, on the other hand, deals with duration, the very tension of life itself. "Intuition and intellect repre-

¹ *Op. cit.*, p. 182.

sent two opposite directions of the work of consciousness: intuition goes in the very direction of life, intellect goes in the inverse direction, and thus finds itself naturally in accordance with the movement of matter. . . . from the intellect we shall never pass to intuition.”¹

At last we are relieved of the harrowing alternative: either mechanism or refuge in the unknowable. We can now say to the intellectualists: “Your method is valuable and efficient as far as it goes; it is admirably suited to deal with matter, and it is just the instrument which science needs. But your method does not go far enough; it is limited exclusively to the spatial side of the world; it touches the real, if at all, only superficially and externally. Into the problems of the vital and the psychical it cannot enter; these phenomena will not go into its static molds. Do not, therefore, persist in applying it where it is inapplicable; your mechanistic philosophy can no longer do service here in the expansion of knowledge.” And if the intellectualists, in turn, venture to inquire whether it is our intention to relegate these vital and psychical phenomena to the limbo of the unknowable, we can triumphantly reply that such is not necessary since we have happily discovered a new kind of knowledge, an ultra-intellectual knowledge, in terms of which such phenomena can be comprehended without

¹ *Op. cit.*, pp. 267–268. On this point see Carr’s emphatic statement in *The Philosophy of Change*, p. 163.

being subjected to the torture of the intellectual method. By means of intuition we can know reality and yet escape mechanism. Such is the fundamental position of Bergsonism.

Before passing on to a critical consideration of just what Bergson means by this doctrine of intuition and in how far it would seem to be a valid conception, I cannot refrain from pausing long enough to remark upon the fact that Bergson seems willing to buy his new method at the price of giving the lie to practically the whole of our philosophical and scientific history. In his own opinion, at any rate, his intuitive method is as novel in the twentieth century as Bacon fondly believed his inductive method to be in the seventeenth century. All of the great philosophers and scientists have trusted themselves to the intellectual method; but the intellectual method is hopelessly inadequate. I do not believe that Bergson has, in point of fact, paid the price which he seems willing to pay for his new point of view; I shall try to point out in the next two chapters why I hold this view in the face of the author's own explicit assertions to the contrary. What I desire to emphasize here in these few concluding words of this chapter is that if Bergson had in very truth paid this price, a very strong presumption would have been established *ab initio* against the validity of his doctrine. Any theory which contradicts history, certainly on any of its main implications, has the burden of proof resting

directly upon itself; and, be it said, such a burden is one well-nigh not to be borne. The knell of Nietzsche's ethics of selfishness is sounded in the antagonistic note of history; the salvation of Bergson's intuitionism is that, in one interpretation of it at least, it rings true to history.

CHAPTER III

INTUITION AND INTELLIGENCE

IF one looks closely at the various passages in which Bergson sets forth his epistemological views, one soon discovers a certain inconsistency of statement which is extremely bewildering. Further investigation reveals the fact that this inconsistency arises from a confusion in the author's mind as to the nature and function of intellectual knowledge. He seems to be constantly vacillating between two radically different views of the intellect and its relation to intuition, without any apparent recognition of the fact that he entertains more than one doctrine. One of these views leads him to deprecate the ontological value of intelligence, and to draw a sharp and absolute distinction between intelligence and intuition, between science and philosophy; while the other view impels him to concede some sort of ultimate significance to scientific knowledge and to assign to intelligence a function even within the holy of holies of intuition itself. The first view he constantly and explicitly emphasizes; the second he seemingly unconsciously and implicitly holds. The purpose of the present chapter is to set forth in clear light these two points of view

and to expose their inconsistency. To the chapter which follows is reserved the task of dealing critically with the problems which this inconsistency raises.

I

Even a superficial acquaintance with the writings of Bergson is sufficient to disclose his conviction that there are two kinds of knowledge, namely, scientific and philosophical, or intellectual and intuitive. And these two types of knowledge are, in his view, radically different both as regards their nature and their function. They are turned in contrary directions, possess a different subject-matter, and work by antagonistic methods. The intellect is directed toward the *already-made*, while intuition attaches itself to the *being-made*; intelligence is wholly unable to grasp time, motion and life, while these are the unique objects of intuition; the intellect is purely analytical in its method, while intuition is wholly synthetical. The separation between the two is, thus, sharp and uncompromising; their spheres are distinct, and neither is in danger of trespassing on the domain of the other for the simple reason that each is by nature incapacitated for doing so. Intelligence and intuition are at daggers drawn; science and philosophy have nothing whatsoever to do with each other. Lest it appear that this statement of the case is dogmatic and unjustifiable, we must pause for a moment to trace

in the writings of the author his own expression of the matter.

In *Time and Free Will* we find frequent assertions like this: "Science cannot deal with time and motion except on condition of first eliminating the essential and qualitative element—of time, duration, and of motion, mobility."¹ And exactly the same point is emphasized over and over again in *Creative Evolution*. "Science can work only on what is supposed to repeat itself—that is to say, on what is withdrawn, by hypothesis, from the action of real time. Anything that is irreducible and irreversible in the successive moments of a history eludes science."² And in another place we read: "Real time, regarded as a flux, or, in other words, as the very mobility of being, escapes the hold of scientific knowledge."³ Likewise, the essential quality of living matter "escapes the hold" of scientific knowledge. "If science is to extend our action on things, and if we can act only with inert matter for instrument, science can and must continue to treat the living as it has treated the inert. But, in doing so, it must be understood that the further it penetrates the depths of *life*, the more symbolic, the more relative to the contingencies of action, the knowledge it supplies to us becomes."⁴ And all of this means that science is, by its very method,

¹ P. 115. See also p. 234.

² Pp. 29–30.

³ P. 337. See the discussion following this quotation.

⁴ Pp. 198–199.

limited to the immobile and the lifeless, to the inert and the unenduring. If it essays to deal with duration and mobility, it can at most give us only snapshot views which are external and symbolic of the process it would fain describe; if it tries to grasp the living, the knowledge it gives us misses the reality and is of significance only with reference to the needs of action. For intelligence, whose expression it is, is cinematographical in its method.¹

Not so, however, with philosophy. Instead of standing on the outside and giving only a symbolic and cinematographical description of the stream of reality as it rolls unceasingly on, philosophy plunges into the rush of the current, so to speak, and holds the essence of things "in a firm and final embrace."² "The philosopher must go further than the scientist. Making a clean sweep of everything that is only an imaginative symbol, he will see the material world melt back into a simple flux, a continuity of flowing, a becoming. And he will thus be prepared to discover real duration there where it is still more useful to find it, in the realm of life and of consciousness. For, so far as inert matter is concerned, we may neglect the flowing without committing a serious error: matter, we have said, is weighted with geometry; and matter, the reality which *descends*, endures only by its connection with that which *ascends*. But life and consciousness are this

¹ Cf. *Creative Evolution*, pp. 313, 326, etc.

² *Ibid.*, pp. 342-343.

very ascension. When once we have grasped them in their essence by adopting their movement, we understand how the rest of reality is derived from them. Evolution appears and, within this evolution, the progressive determination of materiality and intellectuality by the gradual consolidation of the one and of the other. But, then, it is within the evolutionary movement that we place ourselves, in order to follow it to its present results, instead of recomposing these results artificially with fragments of themselves. Such seems to us to be the true function of philosophy.”¹ Comprehending reality thus means entering into the object instead of selecting points of view over against it; such is metaphysics itself.² Philosophy leads us into the very heart of things, brings us into thrilling touch with the pulsation of life itself, hurls us into the stream of duration, adapts itself to the sinuosities of pure mobility, and so accomplishes at once and immediately what science attempts, if it attempts it at all, in vain. For the method of philosophy is not the method of the intellect, but the method of intuition—the method of art.

Thus Bergson unmistakably teaches that there are two kinds of knowledge. The former is symbolical and analytical only, adapted merely to the exigencies of conduct; while the latter is synthetical and real, an expression of the innermost essence of

¹ Cf. *Creative Evolution*, p. 369; see also pp. 191, 193.

² *An Introduction to Metaphysics* (English translation), p. 9.

things, and is altogether independent of conduct. These must be regarded as two opposed methods of knowledge, "the first retaining only moments, that is to say, that which does not endure, the second bearing on duration itself."¹ Therefore, in order to penetrate to reality "we must break with scientific habits which are adapted to the fundamental requirements of thought, we must do violence to the mind, go counter to the natural bent of the intellect. But that is just the function of philosophy."²

II

But while we are trying to accustom ourselves to this violent and unrelenting opposition between science and philosophy, we are constantly confronted by a tendency in our author's thought to deny flatly the separation which he is here prone to emphasize. In another set of passages we find the distinction between scientific and metaphysical knowledge gradually obliterated until finally they seem to be conceived of as differing, not in kind, but in degree of concreteness only. Some of these passages are the following.

At the very beginning of *Creative Evolution* we find it argued that duration, such as characterizes our own conscious experience, must be predicated of the material systems which science isolates, "provided such systems are reintegrated into the whole."

¹ *Creative Evolution*, p. 344.

² *Ibid.*, p. 30; see also p. 208.

And we are immediately informed that "they must be so reintegrated."¹ Bergson does not here inquire why this reintegration of the isolated systems of science into the whole must take place; but obviously, this inquiry is exceedingly important for our present purposes, since the reintegration results in the point of view of metaphysics itself. To one whose vision is vitiated by an intellectualistic bias it would seem that science demands this reintegration: the same act of thought which cuts out these systems from the whole shows that, as isolated, they are abstract; the very analysis which results in their isolation implies the synthesis which compels their reintegration into the more comprehensive system out of which they have been taken. One would suppose that such an out and out intellectualistic view as this would be far from Bergson's opinion: but, strange to say, such is not the case. "The more physics advances," he tells us in one place, "the more it effaces the individuality of bodies and even of the particles into which the scientific imagination began by decomposing them: bodies and corpuscles tend to dissolve into a universal interaction."² And again we are informed: "Already, in the field of physics itself, the scientists who are pushing the study of their science furthest incline to believe that we cannot reason about the parts as we reason about the whole. . . . Thereby

¹ P. 11.

² P. 188.

they tend to place themselves in the concrete duration."¹ Such statements as these would not sound at all out of place in the mouth of any representative of the intellectualists; but, coming from Bergson, they are, to say the least, puzzling. One does not quite see how they can be harmonized with the insistence that the point of view and method of science are diametrically opposed to the point of view and method of philosophy, that, in order to be philosophical, one must do violence to the scientific habits of mind.

The whole case is given away and the opposition between science and philosophy once for all surrendered by Bergson's insistence that the metaphysical point of view for which he is pleading is the one which modern science tends more and more to confirm. After describing at some length the inability of science, because of the cinematographical nature of its intellectual method, to grasp the flux of duration, and insisting that consequently another and radically different type of knowledge is necessary for the philosopher, he proceeds to point out what the nature of the new philosophy is. And then he adds the curious remark: "The more we reflect on it, the more we shall find that this conception of metaphysics is that which modern science suggests."² Of course, the question whether

¹ *Creative Evolution*, pp. 368-369. Essentially the same point is emphasized in *Matter and Memory*, pp. 263 ff.

² *Ibid.*, p. 343. The same claim is made in many other passages; indeed, it is one of Bergson's chief arguments in support of his

modern science does or does not tend to confirm the new metaphysics is of no direct concern to us here. Granting that it does, the fact is rather suspicious. For it suggests very strongly the conclusion that modern science leads in the direction of that point of view which we have above been taught to believe is possible only to another unique sort of knowledge which is called metaphysical and which perforce breaks with the scientific method. But how can such be? Apparently, we assume here either that there are two very distinct types of scientific knowledge or that science and metaphysics are simply expressions of one and the same habit of mind. The former alternative Bergson, of course, would not accept—at any rate, there is nothing to warrant our believing that he would accept it.

So it turns out that science and philosophy are not so different after all. Though philosophy may supplement science and give us truths which science does not disclose, it does so only by going farther in the direction in which science points; in the last analysis, reality is the object of both. “It is reality itself, in the profoundest meaning of the word, that we reach by the combined and progressive development of science and of philosophy.”¹

philosophy. See especially the prolonged discussion preceding and following the above quotation.

¹ *Creative Evolution*, p. 199.

III

We now find ourselves in a contradiction. On the one hand, our author seems to contend that a sharp and irreconcilable antagonism obtains between science and philosophy; and, on the other hand, he insists that science and philosophy supplement each other, that reality in its fulness is revealed only by the combined results of the two. How can we explain this contradiction? The answer, one may venture to affirm, is fairly obvious. The contradiction in question is traceable to two fundamentally different views of the nature and function of intelligence and intuition which underlie the whole discussion of the problem.

According to one view of intelligence which Bergson holds, its fundamental function, indeed, its only function, is to deal with the static and the dead, in a word, with matter; when it attempts to seize the mobile and the vital it needs must arrest their mobility and duration and so misses their real nature. This conception of intelligence is the one which first catches the attention of the student of the new philosophy, because it is the conception which the author explicitly holds and continually emphasizes. Any number of passages might be quoted in support of this contention, but the view is so obviously Bergsonian that this is not necessary. Most of what Bergson has to say about intelligence is an elaboration of this point of view.

The whole consideration of the genesis of the intellect and its relation to instinct, for example, is for the one specific purpose of proving that intelligence "finds itself naturally in accordance with the movement of matter" and hopelessly sundered from the mobility of life.¹ Nor can it ever get beyond material and spatial categories in its operations: of the discontinuous and the immobile alone is it able to form clear and distinct ideas. To give the passages in which such views are expressed would be to quote a large part of the *Creative Evolution*. To all appearances, the lesson that Bergson is most anxious to have us learn is that intellectual knowledge concerns only the static, the inert, the lifeless, the spatial—matter.²

Now the conception of science which this epistemological doctrine implies is obvious. It is essentially the conception of Descartes and of Kant. If intelligence is limited to spatial and quasi-spatial categories, as the foregoing view of the nature of intelligence forces us to say it is, then science must find its ideal expression in mathematics; all of its laws must be stated in mechanical terms, and mathematical formulæ must be the type of scientific knowledge. Such is the conclusion to which we are bound to come if we start out from these premises. And such is the conclusion to which Bergson does

¹ *Op. cit.*, p. 267. For the genetic account see particularly pp. 137 and following.

² Cf. *Creative Evolution*, pp. ix-x, 46, 51, 154, ff. 163, 165, etc.

come. He assumes it in more than one passage in his writings; I shall quote here only two which are very explicit. In *Time and Free Will* we read, "Duration, as duration, and motion, as motion, elude the grasp of mathematics: of time everything slips through its fingers but simultaneity, and of movement everything but immobility"; and from this the conclusion is drawn that *science* cannot deal with duration and movement.¹ Of course, this argument has significance only if science and mathematics are identical terms; there is no meaning in it otherwise. Exactly the same identification is made in *Creative Evolution*: "We cannot insist too strongly that there is something artificial in the mathematical form of a physical law, and consequently in our scientific knowledge of things."² Nor is this identification accidental, a slip of the author's pen; it recurs too regularly for that.³ And it is the logical outcome of his doctrine that science issues from an intellect that is limited in its vision to the mechanical and the spatial.

¹ P. 234.

² P. 218; the italics are mine.

³ See particularly *Creative Evolution*, pp. 206, 208, and the extended discussion of the nature and method of modern science on pages 329-343. Compare: "All the operations of our intellect tend to geometry, as to the goal where they find their perfect fulfilment" (p. 210). And: "The movement at the end of which is spatiality lays down along its course the faculty of induction as well as that of deduction, in fact, intellectuality entire" (p. 216). And: "Modern science is the daughter of astronomy; it has come down from heaven to earth along the inclined plane of Galileo, for it is through Galileo that Newton and his successors are connected with Kepler" (p. 335).

Of course Bergson recognizes the existence of the biological and mental sciences, and he refers to them not infrequently. But he does so in such a way as to confirm our suspicion that the conception of science which he entertains identifies it with mathematical formulæ and spatial categories. He is inclined to believe that "science is less and less objective, more and more symbolical, as it goes from the physical to the psychical, passing through the vital . . ."¹ And he is inclined to believe this because of his assumption that science, by its very nature as such, is not competent to deal with psychical and vital processes, that, in attempting to comprehend such processes, it is attacking phenomena which cannot be forced into mathematical and spatial molds—the only tools which, because of its intellectual origin, it has at its command. Small wonder that science becomes less and less objective the farther it tries to penetrate into these phenomena; as it advances it is more and more removed from the essence of the data which it vainly tries to fathom. This new wine cannot successfully be put into its old bottles.

Obviously, if this be the nature of science and if reality develops and endures in time, science is characterized by an inherent inability to come to grips with reality. In fact, on the basis of these assumptions, the more scientific experience becomes

¹ *Creative Evolution*, pp. 359–360. See in this connection the discussion, pp. 198–199.

the farther is it removed from the real. For matter, we are repeatedly informed, is the inverse movement of life, while the intellect is in accordance with the movement of matter. And if science is the result of intellectual activity and if reality and the movement of life are identical, it would seem to follow with all the certainty of a mathematical demonstration that science leads inevitably away from reality. The more scientific our experience is, then, the more abstract it must be. If it were pure intellectuality, that is, if it were thoroughly scientific, it would find itself wholly abstract. Science and reality, as Bergson here defines them, can have nothing to do with each other.

It is therefore not strange that philosophy must break with science, do violence to the scientific habits of the mind, eschew every semblance of analysis and 'take things by storm.' Either this is true, or mechanism is the only philosophy. Since it is the business of philosophy to deal with the vital and the psychical, the dynamic and the enduring, since philosophy aims to dive boldly into the stream of the evolution of life and bring to the surface information of genuine ontological significance, there is nothing left for it to do except to turn its back on science and the scientific method and valiantly set out alone to accomplish its task. From science it can expect nothing but a set of mechanistic tools which would hinder rather than assist in the enterprise—unless, indeed, we are ready

to accept the verdict of a mechanistic philosophy. Bergson states the matter with admirable clearness: "When the intellect undertakes the study of life, it necessarily treats the living like the inert, applying the same forms to this new object, carrying over into this new field the same habits that have succeeded so well in the old; and it is right to do so, for only on such terms does the living offer to our action the same hold as inert matter. But the truth we thus arrive at becomes altogether relative to our faculty of action. It is no more than a *symbolic* verity. It cannot have the same value as the physical verity, being only an extension of physics to an object which we are *a priori* agreed to look at only in its external aspect. The duty of philosophy should be to intervene here actively, to examine the living without any reservation as to practical utility, by freeing itself from forms and habits that are strictly intellectual. Its own special object is to speculate, that is to say, to see; its attitude toward the living should not be that of science, which aims only at action, and which, being able to act only by means of inert matter, presents to itself the rest of reality in this single respect. What must the result be, if it leave biological and psychological facts to positive science alone . . .? It will accept *a priori* a mechanistic conception of all nature . . ."¹

¹ *Op. cit.*, pp. 195-196.

IV

Bergson holds another view of the intellect, however, that gives rise to a view of science and the scientific method which is very different from the one above described, and on the basis of which the relation between science and philosophy is defined in wholly different terms. Since this view is nowhere explicitly stated in Bergson's writings, but is only an implicit assumption which he from time to time makes in his discussion of the problem, it is necessary for us to set it forth in some detail.

I shall begin by calling attention to the following statement of the relation between intelligence and intuition. "Intelligence remains the luminous nucleus around which instinct, even enlarged and purified into intuition, forms only a vague nebulosity. But, in default of knowledge properly so called, reserved to pure intelligence, intuition may enable us to grasp what it is that intelligence fails to give us, and indicate the means of supplementing it. On the one hand, it will utilize the mechanism of intelligence itself to show how intellectual molds cease to be strictly applicable; and on the other hand, by its own work, it will suggest to us the vague feeling, if nothing more, of what must take the place of intellectual molds. . . . But . . . it is from intelligence that has come the push that has made it rise to the point it has reached. Without

intelligence, it would have remained in the form of instinct, riveted to the special object of its practical interest, and turned outward by it into movements of locomotion."¹ The point of immediate interest to us in this passage is the author's confession that the mechanism of the intellect is made use of to transcend the point of view of intelligence; that the deeper insight of intuition, the development from the instinctive to the intuitive level, is made possible only by the aid of intelligence. So far as one can see, there is only one conclusion to be drawn from this frank admission. If it is meant in earnest and not in jest, it implies that intelligence is not so hopelessly sundered from intuition as Bergson, in most of his criticisms of intelligence, would seem to desire us to believe. For it is fairly obvious that if the intellect can in any way aid in the creation of the point of view of intuition, the intellect must in some sense be involved in intuition; that if the transformation of instinct into intuition be impossible apart from the mechanism of intelligence, that mechanism must perforce be a real part of intuition itself. But if this be so, it plainly follows that intelligence and intuition are not distinct and even contradictory types of knowledge: the difference between them can at most be one of degree, not of kind.

I am fully aware that Bergson thinks such an admission as he above makes in no wise involves

¹ *Op. cit.*, pp. 177-178. See, further, pp. 181-182, 192-193.

the conclusion which we have here drawn from it. He insists, despite expressions of the kind above quoted, that it is not intelligence which does the work after all, but rather the vague 'nebulosity,' the 'luminosity' which surrounds intelligence; unaided intellect could never produce the intuitive point of view, it is the vague nebulosity encircling intelligence which is the dynamic force that drives consciousness on to this new sort of knowledge. We learn to swim by swimming, and we learn to intuit by intuiting; just as it would be impossible to acquire the art of swimming by expatiating at length upon the characteristics and method of walking, so is it impossible to evolve intuition out of the mechanism of pure intellect alone. Since I am wholly unable to understand this halo which Bergson places around intelligence and which is so potent a factor in his epistemology, or to grasp the point of the analogy which he draws between the 'vague nebulosity' in its relation to intellectual activity and the fluidity of the water in its relation to the wary pedestrian, I shall not, of course, venture to make any remarks either by way of criticism or of praise of this explanation. I do wish, however, to call attention to some further statements of our author which render the explanation he here offers superfluous, whatever may be its meaning.

Perhaps it is not facetious to observe in passing that Bergson is everywhere arguing in the good

old orthodox fashion in favor of the positions which he champions and against the theories which seem to him erroneous, even though his discussion concerns vital and mental phenomena. His own doctrine of creative evolution—a doctrine the validity of which ought, presumably, to be revealed by intuition alone—is itself advanced by him as more in keeping with the facts of conscious experience, and, consequently, as more intelligible than is either the view of mechanism or the view of finalism, both of which he subjects to a prolonged and searching intellectual analysis. Likewise, twenty-three pages of *Creative Evolution* are devoted to a proof that the idea of 'Nought' cannot be predicated of reality, the proof amounting to the argument that the idea is neither imaginable nor thinkable, that, in short, it is an inherently contradictory conception. But to rest our case upon such observations as these, pertinent and significant though they surely are, would be to claim an easy victory which in the minds of many perhaps would remain of doubtful issue. Nevertheless, we cannot escape the conviction that there are suspicious implications in the fact that, wherever the author finds himself face to face with the necessity of stating just what information it is which intuition gives us, he invariably falls back upon the intellect, not only for the justification of the position revealed, but also—and this is even more significant—for the very definition of the position itself.

We recall that, according to Bergson, matter "is constituted by the movement which leads to space, and is therefore on the way to geometry"; for "the space of our geometry and the spatiality of things are mutually engendered."¹ We recall also the contention that "all the operations of our intellect tend to geometry, as the goal where they find their perfect fulfilment"; for "the movement at the end of which is spatiality lays down along its course the faculty of induction as well as that of deduction, in fact, intellectuality entire." Now, it is evident from this that there are degrees of spatiality, varying from the pure space of geometry to the spatiality of things; matter is not to be identified with pure space. As it actually exists, matter stops short of pure space and, as it were, leans backwards in the general direction of duration: it lacks that 'perfect externality of parts' which characterises 'perfect spatiality'; the parts of matter are, to some extent, interpenetrating. How do we discover this? Are we to thank intuition for the information? Let us see. "If we consider matter, which seems to us at first coincident with space, we find that the more our attention is fixed on it, the more the parts which we said were laid side by side enter into each other, each of them undergoing the action of the whole, which is consequently somehow present in it. Thus, although matter stretches itself out in the direction of space, it does not completely

¹ *Op. cit.*, pp. 202, 218.

attain it. . . ." ¹ The only meaning I can attach to these words is that intelligence itself discloses certain *non-spatial* characteristics of matter. The passage says in effect that, when we think matter rightly, when we grasp the true notion of it and do not content ourselves with the features which perception seems to disclose, namely, its externality of parts, we discover that it exists as a system of interdependent elements which are abstractly viewed when viewed in their isolation. And it is bootless to interpose the objection here that Bergson is more than willing to grant that intelligence is by its nature peculiarly fitted to deal with matter, and that, consequently, there is nothing strange in his assertion that intelligence may comprehend the meaning of matter. For the point of interest, which we must keep constantly before us, is this statement insists that the intellect grasps the various parts of matter as a unity, that, in short, intelligence employs essentially *non-spatial categories* in its interpretation of matter. *The more our attention is fixed on matter, the more obvious is it that matter falls short of pure spatiality.* This frankly assumes —provided we mean by 'attention' what is ordinarily meant by it—that intelligence is capable of directing us away from the spatial characteristics of matter, towards the systematic interconnection of the constituent elements of what we call the material world.

¹ *Op. cit.*, p. 207. See p. 203, and other passages of similar import.

And such an assumption, one cannot but think, is tantamount to an admission that intelligence actually leads in the path which we had supposed was reserved for the exclusive use of intuition.

Essentially the same point is made in another passage in which Bergson calls our attention to the fact that the sense-qualities of matter have underlying them countless vibratory movements. At first glance, of course, these qualities seem to be stable. "Color succeeds to color, sound to sound, resistance to resistance, etc. Each of these qualities, taken separately, is a state that seems to persist as such, immovable until another replaces it."¹ But as a matter of fact such is not the case. Again, how do we know this? By intuition? "Each of these qualities resolves itself, *on analysis*, into an enormous number of elementary movements. . . . In the smallest discernible fraction of a second, in the almost instantaneous perception of a sensible quality, there may be trillions of oscillations which repeat themselves. The permanence of a sensible quality consists in this repetition of movements. . . ." And so it turns out that intelligence, analysis if you prefer, reveals the fact that "the qualities of matter are so many stable views that we take of its instability."² And, be it explicitly noted, this revelation takes place simply and solely by means of the intellect; *analysis* discloses the state of

¹ *Op. cit.*, pp. 300-301.

² *Ibid.*, pp. 301, 302; the italics are mine.

instability in which matter really exists. In other words, the conception of the material qualities which corrects and supplements the erroneous view of sense-perception and which, one would naturally suppose, ought to be the result of the activity of our intuitive faculty is, on Bergson's own confession, the work of the unaided intellect.

Again, as has been suggested in the preceding section of this chapter, one of Bergson's fundamental objections to the ontological value of intellectual knowledge, and one of his basic reasons for the intuitive type of experience, is that the cinematographical method which intelligence necessarily employs wholly unfits it for comprehending motion. And the stock illustrations which he uses to press home this deficiency of the intellectual method are the famous puzzles of Zeno, before which intelligence is supposed to stand hopelessly helpless. So far as intelligence is concerned motion must be made of immobilities; and Zeno is unconquerable so long as you attempt to fight him with his own weapons. Motion is intellectually incomprehensible. It is, however, interesting and perhaps instructive to study somewhat carefully the solution which the intuitive method would give to these troublesome puzzles of the old Eleatic. Not to prolong the discussion, the solution may be put in a few words. It amounts to pointing out the fact that motion as Zeno conceives it is not motion as it really is: and that motion as it really is is discoverable by thought. Zeno

has in mind the sort of motion which the imagination can grasp and which can be defined in terms of visual imagery, while he ought to have defined it as it presents itself to thought, as, namely, a continuous and unitary whole: this is the sum of the 'intuitive' solution of the problem. If we venture to take our author's words at their face value, he says this explicitly: "The absurdity vanishes as soon as we adopt by thought the continuity of the real movement."¹ This, however, may be simply a momentary lapse from the terminology of the new philosophy. But whether Bergson is willing to admit the truth of what he here openly confesses or not, the fact remains that, throughout his many discussions of the arguments of the ancient Greek, he makes the assumption that motion is not 'intellectually unthinkable'; of this anyone who will take the trouble to read these discussions with this point in mind may be convinced. Reduced to its lowest terms, then, the whole matter amounts to the insistence on Bergson's part that Zeno's puzzles are puzzles only because they involve us in contradictions, *intellectual difficulties*; and the solution that is offered is simply that a more intelligent and intelligible notion of movement be substituted for the view which underlies all of Zeno's arguments. So, once more, we find intelligence performing the feat which our author would ask us to believe is the unique task of unadulterated intuition.

¹ *Op. cit.*, p. 310.

Finally, one of Bergson's favorite figures of speech is that intuition is a sort of æsthetic faculty, that it finds its clearest expression in æsthetic appreciation.¹ "When a poet reads me his verses, I can interest myself enough in him to enter into his thought, put myself into his feelings, live over again the simple state he has broken into phrases and words. I sympathize then with his inspiration, I follow it with a continuous movement which is, like the inspiration itself, an undivided act."² And this state of appreciation of the poet's thought and of sympathy with his mood and feelings is the most meaningful example that Bergson has given us of the intuitive consciousness; we may even regard it as a crucial case, since he assures us that in the experience we come into ecstatic and thrilling touch with the very flow of duration itself. But it is obvious to my mind that such an experience as this is shot through and through with thought, that it is nothing more nor less than an expression—tinged with emotion undoubtedly—of what we ordinarily call intelligence. I am utterly incapable of seeing how it can reasonably be denied that intelligence is a fundamental and essential constituent within the experience. For consider: such an experience is possible only to the individual whose intellect is vigorously active, and—what is still more important—the individual who possesses

¹ Cf. *op. cit.*, pp. 177, 340–341.

² *Ibid.*, p. 209.

the experience in the greatest degree is the individual who most clearly grasps the poet's thought and enters most intimately into the *meaning*, the *idea*, he would express. It is the activity of the intellect which makes the sympathetic attitude possible. As Bergson himself is at considerable pains to remind us, if our attention wanders from the subject which the poet is trying to present to us and fixes itself upon irrelevant details, such as the phraseology he employs as the vehicle for the expression of his ideas or the rhythm of this phraseology—that is, in plain language, if our attention lapses into an unintelligent type,—then the significance of what the poet is saying is lost and our sympathetic inspiration dies ere it is born. Under such conditions of attention, consciousness becomes spread-out, as it were, and loses its individuality and simplicity; intuition fails. The less intelligently one hears the poet's verses, then, the farther is one removed from that state of conscious experience which Bergson avows lies so close to pure intuition; and, on the other side, the more intelligently one attends to the poet's ideas, the nearer does one find the land of promise to be. And all of this implies much concerning the nature of intelligence: beyond all question, it implies that intelligence and intuition are strangely bound in an inextricable intimacy.

Other passages of similar import might be commented upon. But it is useless to pile Pelion on Ossa. We have already carried the discussion of

the point into sufficient detail; it is now time to pause and gather together the results of our discussion in the form of a conclusion.

That conclusion is simply this: whether consciously or unconsciously, Bergson holds a view of intelligence and its relation to intuition which is radically different from the view which, most frequently, he seems inclined to hold. When he insists that the mechanism of the intellect is an indispensable factor in the creation of the point of view of intuition, he unquestionably assumes that intelligence and intuition are essentially one type of mental experience and not two fundamentally different types as in other passages he is prone to argue. When he insists that intelligence discloses the fact that matter stops short of pure externality of parts, and that the purely static aspect of the sensible world, the world of material existence, is due to a superficial and unintelligent view which we take of it, he has left far behind the prejudice that intelligence by its very nature is competent to deal only with the spatial and the extended and impotent before interpenetration and unity. And when he urges that by thought we can seize the continuity of real movement, can grasp the process in its uniqueness, he momentarily forgets all that he has said concerning the essential cinematographical nature of the intellect. While, in his tacit assumption that æsthetic contemplation, in which we experience duration itself, is identical with intellectual

appreciation—an assumption, by the way, which he is compelled to make or talk nonsense,—he finds himself in a position which is nothing short of contradictory of his other contention. The intellect is now, if not absolutely identified with intuition, at least made an essential element within it; to the intellect is at last given a synthetic function, and it no longer remains exclusively analytic. From this new point of view, the intellect is regarded as a faculty of the mind by means of which the various aspects of experience are interpreted rather than pictured, comprehended and understood rather than imagined in purely spatial terms. Here we find intelligence turned away from the inert, the static, and the dead, toward interpenetration, mobility, and the vital!

And from this conception of intelligence, naturally, follows a view of the nature of science and its relation to philosophy which we had at first thought was impossible in the Bergsonian system. In the first place, science as such can no longer be identified with mathematics and mathematical physics; its laws are not necessarily forced into the mathematical molds, since now it has other categories at its disposal. Geometry has forthwith ceased to be the goal of scientific endeavor, for the intellect no longer finds its ‘perfect fulfilment’ here. It now begins to appear that a science of the vital and the psychical, which is not one whit less objective, not one iota more symbolical, than are the sciences of the physical order, is possible, nay, necessary. Why not, then, a science

of duration itself? There is, on this hypothesis, no abrupt break between science and philosophy. The product of the intellect and the product of intuition are now seen to be involved in one another: intellectual knowledge and intuitive knowledge are no longer at daggers drawn, they are peaceful bedfellows. Science and philosophy are in some genuine sense one. "Reality itself, in the profoundest meaning of the word, is reached by the combined and progressive development of science and philosophy." Such a statement on the lips of Bergson we can at last understand.

V

The contradiction in which we found ourselves in the earlier part of this chapter is now resolved. We there discovered that our author was prone to emphasize now the antagonism and now the essential unity between science and philosophy. At last we can see that this discrepancy in statement is directly due to two contradictory views of the nature of intelligence and its relation to intuition which he entertains. When he is thinking of intelligence in the first of the meanings above described, he is forced to the conclusion, not only that intelligence and intuition, science and philosophy, have nothing to do with one another, but also that they are contradictory tendencies of the mind. From this point of view, "intuition and intellect represent two opposite directions of the work of consciousness: intuition

goes in the very direction of life, intellect goes in the inverse direction, and thus finds itself naturally in accordance with the movement of matter."¹ But when the second of the above defined meanings of intellect is uppermost in the author's mind, he conceives of the relation between intelligence and intuition not as that of antagonism, but rather as that of subsumption; intuition involves intellectual activity and transcends it, if at all, only as a more comprehensive and concrete form of the same sort of knowledge. From this point of view, "there is no essential difference between the intellect and this intuition itself."²

It must be confessed that the first of these two conceptions of intelligence and intuition is the one which Bergson lays most stress upon. If it is not the theory which he wishes associated with his name, then he has left little undone to make himself misunderstood. Nevertheless, it is the position which he can least afford to champion. It leaves his intuition submerged in subjectivity. For, on the basis of such a theory, intuition is reduced to mere abstract immediacy, and the knowledge it reveals is significant only for the fortunate individual who happens to be endowed with the capacity for intuitive insight. Those who, perhaps because of the 'niggardly provisions of a stepmotherly nature,' have not been so

¹ *Op. cit.*, p. 267.

² *Ibid.*, p. 360. See this whole discussion of the Kantian doctrine of intuition.

endowed must ever regard such knowledge as mysterious—and they will probably be inclined to suspect that the more mysterious it is, the less value it possesses. Such knowledge is, as Hegel has justly remarked, “the sapless abstract of immediate knowledge;” upon it the mind of *man* cannot thrive, however sustaining the minds of individuals here and there may discover it to be. To put the matter plainly, this conception of intuition is on all fours with the subjective experience which mystics from the beginning have endeavored—how vainly, history conclusively shows—to substitute for the intellect as the instrument by means of which the deeper values of life must be revealed.

But, as a matter of fact, Bergson does not rest in such a barren and abstract conception. It is altogether impossible that he should, seeing that he has something to say which is really worth while. Intuitive knowledge is absolutely worthless, or it issues from a source which is very different from an inane metaphysical homesickness. Of this Bergson is well aware. “There are two kinds of intellectualism,” he recognizes, “the true, which lives its ideas: and a false intellectualism, which immobilizes moving ideas into solidified concepts to play with them like counters.”¹ And this true intellectualism, it will be observed, is also *true intuitionism*. On the basis of this view, intuition loses its subjectivity and

¹ *Bulletin de la Société Française de Philosophie*, Vol. I, p. 64.
Quoted by Lindsay, *The Philosophy of Bergson*, p. 19.

becomes objective, as objective as is intelligence itself; but it does so because it is only verbally distinguishable from intelligence. For, certainly, if intuitive knowledge is ultimately the product of intellectual activity, the question must be raised whether there is any essential difference between intuition and intelligence. The consideration of this question, however, must be reserved for the next chapter.

As a summary statement of the main contention of the present chapter, we may put explicitly the dilemma to which Bergson seems to be reduced. Either intelligence and intuition, science and philosophy, are diametrically opposed to each other, intuition excluding intellectual activity and the scientific method being a hindrance to the philosopher; or intelligence and intuition mutually involve one another, intelligence presumably being subsumed in intuition, science being a propaedeutic to philosophy. If the former alternative is accepted, intuition is too subjective to have any universal significance and Bergson's philosophy is of importance precisely in so far as it is inconsistent with its fundamental presupposition. Apparently Bergson more or less vaguely feels this and tacitly accepts the latter alternative. But in this case much of the novelty of the *philosophie nouvelle* disappears and we find the author teaching a doctrine which, one is inclined to think, has been taught in one form or another at least since the days of Plato, and in these latter

days has been persistently emphasized, either in tacit reference or direct appeal, by Kant and, particularly, by Hegel and the neo-Hegelians. But Bergson is by no means clear on the point. The many puzzling inconsistencies which bewilder the reader of his discussions arise from the fact that he is prone to take now the one and now the other of these two points of view, according as it suits his purpose at the moment, without ever coming to close quarters with the problem which logically confronts him—the problem, namely, whether his original assumption concerning the nature of intellectual knowledge is justifiable and, if not, whether his conception of intuition differs in any appreciable degree from the definition which modern epistemological theory has given to intelligence.

CHAPTER IV

THE PROBLEM OF INTELLIGENCE

IN the preceding chapter we have seen that Bergson holds two distinct views of the nature of intelligence; on the one hand, he defines intellect so as to limit it to the material order, and, on the other, he is inclined to admit that it transcends the material order and is competent to deal with the dynamic and the vital. We have also seen that he consciously adopts the first view, while he implicitly assumes the second even when most interested in condemning it. Our task in this chapter is to deal critically with the problem which this inconsistency raises. We shall first place ourselves at the point of view for which Bergson most persistently pleads and, by tracing in general outline the fortunes which have followed this theory in the development of modern philosophy, we shall endeavor to expose its inadequacy. As a result of our discussion we shall discover that the doctrine which Bergson implicitly assumes is the one which the history of thought, as well as the facts, seems to support, and is essentially identical with the doctrine which he is most anxious to deny.

I

If we turn to the preceding chapter and reread the summary of the first of the two views of the intellect which Bergson holds, we are impressed with the fact that his definition is a very narrow one. Indeed, one is at first inclined to feel that intelligence and imagination are regarded as strictly synonymous terms. To think an object or event, Bergson seems to say, means to picture it forth in the form of spatial imagery. Everything intelligence touches it is supposed to solidify, and it does this because by its very nature it is able to form ideas—images—of the spatial alone. When intelligence “tries to form an idea of movement, it does so by constructing movement out of immobilities put together.”¹ And one suspects that the basis for such a statement as this is the assumption that forming an idea of an object and forming an image of it are one and the same thing. This suspicion almost grows into a settled conviction as one reads Bergson’s frequently reiterated assertions to the effect that time and motion are essentially unintelligible. When he urges that it is impossible for the intellect to grasp motion, that the fundamental characteristic of motion, namely, mobility, escapes intelligence, what he seems really to have in mind is the impossibility of visualizing mobility; try to imagine movement and you forthwith arrest it and transform mobility into “immobilities put

¹ *Creative Evolution*, p. 155.

together," and from this the conclusion is drawn that mobility, as such, cannot be thought. To cite a particular instance, we are informed that a simple movement, such as raising the arm, is wholly inconceivable, and it is so because we cannot picture the mobility of it. "Where should we be if we had to imagine beforehand all the elementary contractions and tensions this act involves . . . ?"¹ And, as the context plainly shows, this question is supposed to be decisive; *imagining* the contractions and tensions involved in the movement is assumed to be identical with comprehending the movement. Again, in the author's numerous discussions of the arguments of Zeno, this same assumption is implicitly made; we are informed that the intellect gets into these puzzles over motion because it necessarily cuts the continuous movement into static stages.² The contention is also persistently made that the intellect cannot grasp duration, that only homogeneous time is comprehensible by it. But, if one will read carefully the author's various statements in this connection, one will find it difficult not to believe that he fails to make any distinction at all between thinking time and ~~imagining~~ it. When we try to think time, he says in effect, it is necessary for us to represent it to ourselves under the form of a line made up of parts external to each other; we must think of the temporal series as made up of several moments, each moment bearing

¹ *Op. cit.*, p. 299.

² Cf. particularly *ibid.*, pp. 308 ff.

to all other moments a relation analogous to that which one point of space bears to other similar points. But all of this assumes that time thought and time imagined are one.¹

If one were inclined to hold Bergson strictly to account for this confusion of terms, criticism of his view would, of course, be superfluous. A simple statement of the matter reduces it to an absurdity. For the merest tyro in psychological analysis knows that, however close the connection between thought and imagination may be, and however shifting the boundary that separates them, they are nevertheless fundamentally different in at least one important respect. Though they may happen in any given case to involve the same imagery, still the imagery of the thought process possesses a meaning which is its basic characteristic and which is wholly lacking to the imagery of the imaginative process; and, furthermore, this meaning side of the thought process is something which no imagery will suffice to express because it transcends all imagery. Surely it is one thing to imagine a cut finger and a bottle of peroxide of hydrogen, and an altogether different thing to think the relation that exists, or may exist, between the injured member and the contents of the bottle. In the one case, the imagery is without any definite meaning, while in the other the meaning of the

¹ Cf. Russell's statement: "Bergson is a strong visualizer, whose thought is always conducted by means of visual images." *The Monist*, July, 1912.

imagery is all-important. In the same way, to imagine a movement or a period of time is very different from thinking it: imagination arrests the mobility or the duration in its flight and fixes it in a spatial mold; but thought does nothing of the sort, since it treats the imagery which it employs—granting for the sake of the argument that thought always involves imagery, which is not by any means axiomatic—as a meaningful symbol and not as in itself significant. It thus appears that this narrow interpretation of the nature of thought makes the matter so puerile that doubt is cast upon the accusation that Bergson holds such a view. He must have had in mind another and more profound conception of the nature and function of intelligence.¹

The most liberal view of this Bergsonian doctrine which the facts of the case will permit us to take would place it on a level with the Kantian conception of the 'Understanding' (*Verstand*) as expounded in the first of the three *Critiques*. In its extremest form, perhaps, and yet in the form in which Kant was apparently most anxious to have it understood this view is expressed in the following words: "If

¹ Bergson does seem to draw some sort of distinction between concepts and images, regarding the concept as a meaningful symbol (*Creative Evolution*, pp. 160-161, 278 ff.). Several readings of these passages, however, have not made clear to my mind the distinction he would be willing to admit. If concepts are "derived from the consideration of solids," and are "outside each other, like objects in space," then, for my part, I cannot see what more is necessary to identify them with what are ordinarily called images.

sensibility is the *receptivity* of the mind in the actual apprehension of some impression, *understanding* is the *spontaneity* of knowledge, or the faculty that of itself produces ideas. We are so constituted that our *perception* always is sensuous; or it shows merely the manner in which we are affected by objects. But, we have also *understanding*, or the faculty of thinking the object of sensuous perception. Neither of these is to be regarded as superior to the other. Without sensibility no object would be given to us, without understanding none would be thought. Thoughts without content are empty, perceptions without conceptions are blind. It is therefore just as necessary to make our conceptions sensuous, that is, to add the object to them in perception, as it is to make our perceptions intelligible, that is, to bring them under conceptions. Neither of these faculties or capacities can do the work of the other. Understanding can perceive nothing, the senses can think nothing. Knowledge arises only from their united action."¹ Neglecting for the present those characteristics of sensibility and understanding which are peculiar to Kant's system, one is struck by the fact that this passage presents to us a view of thought which is essentially the same as the view which Bergson has in mind in his frequent criticisms of the ontological value of intellectual knowledge. For, as Kant views the matter, understanding is held fast in the clutches of the sensuous and the spatial; by its

¹ Watson, *Selections from Kant*, pp. 40-41.

very nature it can never touch the real.¹ "There is therefore no way of avoiding the conclusion," he informs us towards the end of the Analytic, "that the pure conceptions of the understanding can never be employed transcendentally, but only empirically, and that the principles of pure understanding can apply only to objects of sense, as conforming to the universal conditions of a possible experience, and never to things as such, or apart from the manner in which we are capable of perceiving them."² In other words, the categories of the understanding are applicable only to objects as they exist in immediate experience and are consequently categories of mechanism. Now this is precisely the difficulty that Bergson finds in intellectual knowledge, and it leads him, as it led Kant, to deny the ontological value of such knowledge. Both the Kantian 'understanding' and the Bergsonian 'intelligence' refer, and can refer, only to the static and the spatial; both possess only the function of thinking 'objects of sensuous perception.' Bergson and Kant are at one here. Hence it would appear that Bergson's strictures upon intellectual knowledge are well taken, if it is once admitted that

¹ Of course for Kant the understanding can deal with time, while Bergson's 'intellect' cannot successfully deal with the temporal. This, however, does not vitiate the comparison which we here venture to make between the views of the two thinkers. For Bergson urges that time is real, whereas for Kant it is phenomenal. They are agreed that this faculty of the mind, which they call by different names, cannot grasp reality; and they are agreed, essentially, as to the reason.

² Watson, *op. cit.*, pp. 130-131.

intellectual knowledge is adequately described in the *Critique of Pure Reason*. A brief survey of the fortunes which attended the Kantian doctrine in the development of modern epistemological theory ought, therefore, to throw considerable light on our present undertaking.

II

That Kant's doctrine of thought has proved unsatisfactory the student of the history of post-Kantian epistemology knows full well. And its unsatisfactoriness lies in the narrowness of the conception, a defect which, as we shall see later, arises from an inadequate survey of experience. There can be no question that Kant here describes one important aspect of thought; but it is equally unquestionable that his description lacks completeness. His theory was hardly stated before a suspicion arose that it was not based upon an exhaustive analysis. Even Kant himself seemed dimly conscious that his position was open to serious question: the elaborate precautions which, in his prolonged discussion of the constitutive and regulative uses of pure reason, he takes to explain why it is that thought persistently strives to transgress the narrow limits which he set for it in the opening pages of the *Critique of Pure Reason* cannot but be taken as an indication that he was half wondering why this inevitable tendency towards illusion should dog man's soul, why thought should thus irresistibly long for light when, by its

very nature, it is hopelessly doomed to Stygian darkness. And in the other *Critiques* he virtually renounces this narrow view of thought, and tacitly assumes another which is fundamentally different and much more comprehensive. His immediate successors all more or less clearly saw the inadequacy of his doctrine; and, although they did not all equally clearly discern the way out of the difficulties which the theory raised—a way which Kant himself had more than hinted at,—still it is not without significance that they were all agreed that there were difficulties and that these difficulties centred about the narrow definition which Kant had forced on thought and the consequences that followed from that definition.

These consequences are so well known it is useless to rehearse them here in detail. Chief among them, for our purposes, are the dichotomy of the world into phenomena and noumena, things as they are known and things as they really are, and the further doctrine that the latter lie essentially beyond the bounds of knowledge. The dualism is thus complete; reality is effectively separated from its appearances and becomes an object of transcendent mystery. Experience is identified with phenomena, and noumena are consequently regarded as trans-experiential. Strive as we may, then, we can never hope to seize reality in its essence; for the categories of thought are limited in their application to the objects of experience, to phenomena, while reality, the nou-

menon, is far removed from the territory of possible experience. "In the end," says Kant, "we are unable to understand how such noumena are possible at all, and the realm beyond the sphere of phenomena is for us empty."¹

It is equally well known, however, that this dualism is not Kant's final word. If it had been, neither of the last two *Critiques* could have been written. For the basic presupposition of the *Critique of Practical Reason*, as also of the *Critique of Judgment*, is that knowledge of the trans-experiential is not only possible but actual. In the former, the moral law is definitely stated, the necessity of freedom is exhibited, immortality is guaranteed, and the existence of God proved; while in the latter there is disclosed the fact that the problems which arise in connection with the phenomena of the beautiful and of systematic organization are not insoluble by rational reflection. And all of this, despite the previous assertions of the *Critique of Pure Reason* that the problems of ethics and of aesthetics lie in the realm "beyond the sphere of phenomena," which we have been assured "is for us empty." It may be, and doubtless was, true that Kant himself was not conscious of a change in point of view here from that which is defined for us in the opening pages of the first *Critique*. Be this as it may, there unmistakably is a change in point of view, and it would perhaps be no exaggeration to say that in this change of view is to be found one

¹ Watson, *op. cit.*, p. 132.

of Kant's most important contributions to epistemological theory. The necessity of the change suggests that the conception of 'understanding' with which he begins lacks something in completeness.

So far as our present purpose in this historical sketch is concerned, the chief lesson to be learned from this inconsistency of the Critical Philosophy is the implication of it that noumena, things as they are in reality, are comprehensible by means of categories provided categories other than those of the *pure understanding* are made use of. Theoretically, of course, Kant insists to the end that noumena are unknowable, that reality still transcends the limits of human knowledge. As a matter of fact, however, he admits that noumena are knowable, that reality falls within the bounds of knowledge, indeed, that noumena are even more intimately knowable than are phenomena—only, knowledge must be defined so as to include categories other than those of the purely mechanical outlook, judgment must be predictable of ethical and æsthetic contemplation. For when we enter the last two *Critiques* we are still dealing with objects of knowledge, with ordinary intellectual analysis, and yet we have departed so far from the realm of phenomena that we find ourselves face to face with the hitherto mysterious noumena which ever and anon appeared dimly on our horizon as it was delimited in the first *Critique*—but we have also left far behind the purely mechanical point of view of the 'understanding' and 'sensibility.'

This suggestion of the Critical Philosophy Hegel develops at great length in his *Phenomenologie des Geistes* and *Logik*, and he explicitly states the conclusion which is logically involved in it. His discussion results in the famous doctrine of the Notion (*Begriff*). He attempts to prove, by a detailed description of the fact, that reality is thoroughly comprehensible by intellectual analysis, when once intellect is rightly defined as a process of progressive interpretation of experience and when experience and reality are brought into a comprehensible relation to each other. The *Phenomenology* and the *Logic* both accept the point of view of common sense as the starting-point, and develop the implications of knowledge as it presents itself from this point of view. The *Phenomenology* begins "with the first and simplest phase of mind, immediate consciousness," and proceeds to show how it of necessity works "onward to the philosophical point of view."¹ This philosophical point of view he calls the standpoint of 'absolute knowledge' or the 'notion.' In general, this same method is followed by the *Logic*. It begins with thought as it expresses itself in the so-called common sense view of things (The Doctrine of Being), follows the development of thought through the scientific point of view (The Doctrine of Essence), on to its consummation in the philosophical outlook (The Doctrine of the Notion). The doctrine of the notion is, thus, Hegel's final word concerning

¹ *Enc.*, section 25.

thought and its relation to reality; and this doctrine of the notion is only the position that thought is genuinely objective, that reality in its innermost essence is to be defined in terms of rational categories.

We shall pause here only to state explicitly the more important aspects of this Hegelian doctrine. In the first place, it is to be noted that the standpoint of the notion is quite different from the standpoint of the Kantian *Verstand*, which it is supposed to transcend by subsuming. In the second place, thought as Hegel here defines it is regarded as capable of entering into the heart of reality and of seizing it in its mobility. In fact, the development of thought is looked upon as nothing but the progressive definition and explication of the real; the *Begriff* keeps step with reality and cannot at any time be separated from it, since it is only in touch with reality that thought lives and moves and has its being. And, finally, the standpoint of the notion is still the standpoint of thought or intelligence, and not of some new intuitive and non-intellectual type of experience. In defining this Hegelian doctrine, however, we must not neglect to emphasize the fact that intelligence or thought as thus defined is not confined to the spatial and sensuous in its operations; it is not mere 'picture-thinking.' On the contrary, it has all the categories of experience, including those which emerge from vital and mental phenomena, at its command. Indeed, it is Hegel's basic contention that thought is wholly misunderstood until it is seen

to include within itself not only the Kantian 'understanding,' but also the ethical and æsthetic insight upon which the last two *Critiques* lay emphasis. For thought, Hegel contends, *das begreifende Denken*, is at once abstract understanding (*Verstand*) and feeling and volition—in a word, organized conscious experience. "The principles of logic are to be sought in a system of thought-types or fundamental categories, in which the opposition between subjective and objective, in its usual sense, vanishes. The signification thus attached to thought and its characteristic forms may be illustrated by the ancient saying that '*νόος* governs the world,' or by our own phrase that 'Reason is in the world': which means that Reason is the soul of the world it inhabits, its immanent principle, its most proper and inward nature, its universal. . . . If thought is the constitutive substance of external things, it is also the universal substance of what is spiritual. In all human perception thought is present; so too thought is the universal in all the acts of conception and recollection; in short, in every mental activity, in willing, wishing, and the like. All these faculties are only further specialisations of thought. When it is presented in this light, thought has a different part to play from what it has if we speak of a faculty of thought, one among a crowd of other faculties, such as perception, conception and will, with which it stands on the same level. When it is seen to be the true universal of all that nature and mind contain, it extends its

scope far beyond all these, and becomes the basis of everything."¹ Such, in essence, is the Hegelian theory of thought in so far as it concerns our present problem.²

The fortunes that have attended this theory in the history of post-Hegelian philosophy have been varied. There is no need for us to attempt here a detailed exposition of its development. Suffice it to say, those who have been inclined to accept the theory in principle have only recast the expression of it without altering its basic features; while those who have assumed an antagonistic attitude towards it have, more frequently than otherwise, directed their criticism against a misconstruction of the doctrine and have spent their shafts on a man of straw. But, in spite of the adverse criticism to which the doctrine has been subjected, in spite of the numerous attacks

¹ *Enc.*, section 24 (English translation, pp. 46-47).

² The above summary and necessarily dogmatic statement of this basic and, be it confessed, difficult Hegelian doctrine I have elsewhere attempted to justify at some length, and I have also endeavored there to call attention to certain misconceptions to which the doctrine seems liable. For this reason, I feel warranted in passing the matter by here with so few words. The reader who may demand further discussion of the matter and a more detailed explanation of the interpretation which I have placed upon Hegel's words will find what I have to say on the problem in my monograph *Thought and Reality in Hegel's System*, particularly in the first two chapters.

In his *Hegel's Logic* Professor Baillie gives an interesting and suggestive account of the development of the doctrine of the *Begriff* in its earlier stages, and he points out the close connection, the vital relation, between intuition and reflection which Hegel insisted upon years before the publication of the *Logic* (cf. especially chapters III and IV).

that have supposedly been directed against it, it has had a very lusty growth and has contributed not a little to the development and determination of current philosophical problems. Indeed, one must admit it to be historically accurate to say that, since this Hegelian doctrine was given to the world, it has been —whether for better or for worse we do not now inquire—the most important factor in fixing and defining philosophical method. It has become the ‘orthodox’ point of view; and practically all of the new contemporary movements in the field of epistemology are, in one form or another, reactions against it.

This is eminently true of Bergsonism. While Bergson gives no evidence of acquaintance with Hegelianism, either in the form in which it is presented by Hegel himself or in that which it has taken in the so-called neo-Hegelian movement, the theory he advances implies a position which is contradictory of the Hegelian standpoint.¹ He insists, by implication, that Kant’s doctrine of the understanding, as that doctrine is elaborated in the *Critique of Pure Reason*, is the only possible conception of intelligence and that, consequently, Hegel and the neo-Hegelians are in error; that, on Kant’s own admission, intelligence cannot grasp reality, and therefore, a non-

¹ The only statement in Bergson’s chief writings which might be construed as a reference to Hegelianism, at least the only statement of the sort which has fallen under my eye, is the vague assertion about the philosophy of the Idea found on page 362 of the *Creative Evolution*.

intellectual type of knowledge must be assumed—unless, indeed, we are willing to remain in Kant's agnosticism. There is for Kant "only *one* experience, and the intellect covers its whole ground. This is what Kant expresses by saying that all our intuitions are sensuous, or, in other words, infra-intellectual. And this would have to be admitted, indeed, if our science presented in all its parts an equal objectivity. But suppose, on the contrary, that science is less and less objective, more and more symbolical, as it goes from the physical to the psychical, passing through the vital; then, as it is indeed necessary to perceive a thing somehow in order to symbolize it, there would be an intuition of the psychical, and more generally of the vital, which the intellect would transpose and translate, no doubt, but which would none the less transcend the intellect. There would be, in other words, a supra-intellectual intuition."¹ Against this position Hegel contends: "According to Kant, the things that we know about are *to us* appearances only, and we can never know their essential nature, which belongs to another world we cannot approach. Plain minds have not unreasonably taken exception to this subjective idealism, with its reduction of the facts of consciousness to a purely personal world, created by ourselves alone. For the true statement of the case is rather as follows. The things of which we have direct consciousness are mere phenomena, not *for us* only, but *in their own nature*; and the true

¹ *Creative Evolution*, pp. 359-360.

and proper case of these things, finite as they are, is to have their existence founded not in themselves but in the universal divine Idea. This view of things, it is true, is as idealist as Kant's; but in contradistinction to the subjective idealism of the Critical philosophy should be termed absolute idealism."¹ "Thoughts, according to Kant, although universal and necessary categories, are *only our* thoughts—separated by an impassable gulf from the thing, as it exists apart from our knowledge. But the true objectivity of thinking means that the thoughts, far from being merely ours, must at the same time be the real essence of the things, and of whatever is an object to us."² The issue, thus, is definitely joined. I wish to raise here the question whether Hegel's contention can in principle be justified.

III

First of all, let us be sure that the issue is clearly grasped. Both Hegel and Bergson agree that if Kant's conception of the understanding is an exhaustive and final definition of intelligence, if the reaches of rational knowledge are no greater than the boundaries of the Kantian 'experience,' then certainly reality cannot be grasped by rational knowledge; on this point there is no difference of opinion in fundamentals between Kant, Hegel and Bergson. Both Hegel and Bergson would insist further that

¹ *Enc.*, section 45.

² *Ibid.*, section 41.

either the *Critique of Practical Reason* must be thrown aside as the vanity of vanities or the understanding transcended; on this point also there is unanimity of opinion. But, whereas Hegel maintains that Kant, in his conception of the understanding, emphasizes only one side of thought and that, when once thought is adequately defined, it discloses within itself the capacity for transcending the phenomenal plane and for comprehending reality, Bergson rests in the assumption that Kant's theory gives us the last word concerning the nature of intellectual knowledge and that, therefore, intelligence is a snare and a delusion in the search for the real. The question before us, then, is in the last analysis this: Is Kant's doctrine of thought, as that doctrine is given under the discussion of the understanding, such that it does full justice to the real nature and function of intellectual activity? If so, then undoubtedly Bergson's position is correct, or agnosticism is inevitable; if not, then, whether Hegel is right or wrong, Bergson's position is without question erroneous.

Two points in connection with judgment seem to me so obvious that I deem a bare statement of them sufficient to warrant their acceptance. The first is that every act of judgment, whatever may be its object, is more than merely analytical in its nature. That it does involve analysis no one, of course, would care to deny. "In order to know, it is absolutely necessary that the differences between the parts of things should be clearly apprehended, that we should

not confuse things which are unlike, or fail to make proper distinctions. If we examine a number of instances where a real judgment is made, we shall find that this moment of analysis, or discrimination, is always present.”¹ The truth of this statement every one is compelled to admit. But this, obviously, is only one side of the story. Every judgment also involves synthesis; and, what is more important still, every judgment is analytic just through its synthetic function. Anyone may be convinced of the truth of this assertion by simply observing the nature of an act of judgment. “To see the escape-movement wheel lying inside the watch does *not* ‘give’ me this wheel as a part of a mechanical arrangement; to know it as part of *such* a whole I must understand it; and in understanding it, i.e., in my analysis, perform the synthesis of the watch as a definite mechanical contrivance.”² Even now as I write I discover that a part of my typewriter needs oiling; the judgment obviously involves synthesis, since I could have no basis for the conclusion that a part is in need of lubrication except I view it as a constituent member of the whole. We really never *think* a thing at all unless we think it in its relations; and to think a thing in its relations, real or accidental, is a synthetic act. A purely analytical judgment would be nothing more than a bare tautology, A is A, that is, would be

¹ Creighton, *An Introductory Logic*, new edition, section 82.

² Bosanquet, *Logic*, Vol. I, p. 102. This whole problem of the analytic-synthetic nature of judgment is discussed here in a very instructive and suggestive manner, pp. 97-103.

no judgment at all: the very act of analysis itself is impossible apart from synthesis. Differences and differentiations have significance and meaning only in the midst of likenesses and homogeneities. "In every act of thinking, in every judgment, analysis and synthesis go hand in hand, and one has no meaning except with reference to the other."¹ Judgment is both analytic and synthetic; and it is the one simply because it is the other, that is to say, analysis and synthesis are merely two sides of the same act. This is one point which I should take to be sun-clear.

The other point, which I would present as equally obvious, is that the synthesis (the category) which characterizes any particular act of judgment is determined, not by the mechanism of the judgment as an act of thought, not by the inherent *form* of the judgment itself, but rather by the nature of the data with which the judgment happens to be concerned. There is no one sort of unity, such as mechanical or spatial juxtaposition, implied in each and every act of judgment as such; we cannot justly claim that judgment *ipso facto* is limited to this or that particular type of synthesis, or that it is by its very nature incompetent to express other types of synthesis. On the contrary, there are as many sorts of synthesis, as many kinds of categories, open to the mechanism of judgment as there are groups of interrelated phenomena which are objects of possible judgments—and, so far as we are concerned, this includes all

¹ Creighton, *ibid.*

objects. The unity which is involved in a judgment about a watch, for example, is wholly different from the unity involved in a judgment about an organism; the two types of categories differ totally in kind. And yet the one judgment implies synthesis no less and no more than does the other; the one judgment is no less genuine as such than is the other. "We can no more express the properties of a body *quâ* organized in terms of the categories of mechanism, than we can express the properties of a stone in terms of the categories of moral judgment."¹ But we are constantly making judgments about organic bodies, and no one except some epistemologists would think of questioning the genuineness of such judgments. The fact of the matter is that the synthesis which characterizes judgment may be a sort of spatial and temporal juxtaposition, of organic and vital interconnection, or of psychological and teleological interpenetration according as the nature of the phenomena which happen to be the object of the judgment in question is of the one kind or the other. The categories of reason are independent of the form, or the 'mechanism' if you will, of the act of judgment. This variation of the categories of judgment with the phenomena judged about, as well as the necessity of the variation, would appear to be as obvious as is the fact that synthesis of some sort is always present in the operations of the intellect.

¹ A. Seth and R. B. Haldane, *Essays in Philosophical Criticism*, p. 48.

Now, according to Kant's doctrine of the *Verstand*, there are two points of fundamental and far-reaching implications which we must pause here to emphasize. The first is that the *form* of judgment is a sufficient basis upon which to predetermine, determine *a priori*, all of the possible categories of thought; and the second is that all of the possible categories thus determined are temporal and spatial, that is, mechanical, in their reference. In justification of the first of these statements it is probably sufficient to call attention to the way in which Kant goes to work to discover and define the categories. By a simple investigation of the logical form of judgment Kant believes he has an ample basis for his contention that there are possible just twelve categories. "In this manner there arise exactly so many pure concepts of the understanding . . . as there were in our table logical functions of all possible judgments, because those functions completely exhaust the understanding, and comprehend every one of its faculties."¹ The validity of the second of the above statements is guaranteed by a glance at this table of categories which, by hypothesis, includes every possible sort of synthesis that can belong to judgment. As is well known, this table is made up of four general types of categories: those of quantity, of quality, of relation, and of modality. All avowedly refer to objects of 'sensuous perception' and to nothing else. And from this it inevitably follows that, as Kant

¹ *Critique of Pure Reason*, Müller's translation, p. 66.

views the problem, the understanding is limited in its activities to the strictly mechanical categories. The functions of the understanding are the functions of the unity in judgments, the judgments taken into consideration being only of the existential type.¹

But if what we have been urging in the preceding paragraphs is true, then this Kantian doctrine is not based upon an exhaustive, or even an accurate, analysis of the facts. Kant's successors are justified in their contention that thought is more than Kant here conceives it to be, and that the relation between thought and things, between knowledge and its object, is not so external and artificial as Kant would have it. Experience bears out this contention. The categories cannot be determined *a priori*; the "mere form of the understanding" gives us no insight whatsoever into the types of synthesis pertinent to thought; nor is judgment limited to objects of 'sensuous perception' only. It is rather true that judgment passes on beyond the mechanical categories as far as experience shows the way, and we cannot presume to say where the limits of judgment lie. The 'island of illusion' is not found in the misty realm beyond thought, but in the mistaken efforts which thought sometimes makes to delimit itself. It is not difficult for us now to see that Kant was in error; the history of science since his day teaches that with unmistakable clearness. Even in the physical sciences,

¹ Cf. *ibid.*, pp. 56-57.

particularly in chemistry, thought has gone beyond the limits of Kant's table of categories, which he so confidently believed exhausted the possibilities of reason; while in the biological and mental sciences the intellect of man has definitely transcended the mechanical point of view of the understanding and has created categories that are not even suggested by the table of twelve—nor can any one dare to say that there are not still other and undreamt-of categories, new in kind, hidden within the mysteries of the world about us, awaiting only the intellect of genius to bring them to light.¹ Kant himself implicitly admits all of this, as we have already seen though in doing so he is inconsistent with his own doctrines. His successors, particularly Hegel, make the position explicit and fundamental; and we must

¹ Do the biological sciences use categories different from those of the physical sciences? In answer to this question Professor Haldane says: "When this question is clearly realized there is, it seems to me, but one answer to it, and that in the affirmative. In dealing with life we not only use a whole series of special terms, but these terms appear to belong to a specific general conception which is never made use of in the physical sciences" (*Mechanism, Life and Personality*, p. 77). For my part, I am wholly unable to see how, in this day when the biological sciences are making such rapid and splendid progress, such a statement as this can be regarded as other than true. But if it is true, then it involves the confession that the attempt to delimit the scope of scientific endeavor by any sort of *a priori* inference is foredoomed to failure. For if intelligence uses two sets of distinct terms because it has to deal with two sets of distinct facts, there is no reason to assume that it cannot use a third set of terms if it have need of them. But one would think that, even apart from the lessons which the history of science has to teach us in the premises, we should be wary about attempting to say to thought, Thus far and no farther.

now agree that the position is based directly and unmistakably upon the facts of experience.

Hegel rather than Bergson, then, is in the right, at least so far as Kant's views are concerned. The true criticism of the Critical Philosophy is that it stops short in its analysis of knowing experience and needs supplementing by being developed farther in the direction in which it starts; not that it is an exhaustive statement of the facts of knowledge and discloses the necessity of a non-intellectual type of experience to assure us knowledge of reality. There is nothing inherent in the nature of thought, nothing characteristic of an act of judgment, which would render it intrinsically incompetent to seize reality in its essence, even though reality be pulsing with mobility and life and though its parts be qualitatively interpenetrating; for such phenomena thought may, and, as a matter of actual experience, does, frame suitable categories. In so far as Kant's doctrine of the *Verstand* involves presuppositions which contradict these principles, just in so far, we are compelled to insist, is Kant's doctrine in error. And in so far as Bergson agrees with Kant in these presuppositions, just in so far is he likewise mistaken. From this conclusion I can see no way of escape.

IV

So we must contend that all of Bergson's strictures on intelligence are beside the issue. They are directed against a conception of intelligence which

is far removed from the conception held by those who maintain that intelligence is adequate to deal with reality. What Bergson is really criticizing is the Kantian view of the understanding—a view which, one might reasonably suppose, had long since been given up as false. There can be no question that it is a view which ought, in all justice, to be given up; it is a caricature of what intelligence really is.

What would seem to be the true view of thought has emerged from our preceding discussion. Thought is a process of interpretation whereby experience is unified and organized. It is the life of mind which finds expression in conscious experience as a totality. It is evident in common sense and science, in superstition and philosophy. It gives us the physical sciences, but it does not stop there. It is responsible for the biological and the mental sciences, but it does not stop even there. From it come our art, our religion, and our philosophy. It breathes through all the ramifications of our experience, and gives whatever insights we have which are worth preserving. The true, the good, and the beautiful are expressions of it; for it is our very self-consciousness.

From this point of view, there is nothing inherently characteristic of thought which necessitates the disconcerting admission that the world of reality, if it is to be made intelligible rationally, must be forced into the straight-jacket of static and spatial molds. No longer are we compelled to say that whatever

is thought must be spatialized, that thinking the world *ipso facto* means breaking it into inert fragments which are eternally fixed in changeless relations. The categories of mechanism are not the only categories that intelligence has at its command. On the contrary, the categories of life and mind are just as truly in judgment as are the categories of the lifeless and the inert; organic and teleological relations are just as conceivable, just as thinkable, as are spatial relations. Thinking the world means nothing more than interpreting it in terms of any categories which it itself may demand; whether these categories be mechanical and spatial or whether they be organic and teleological, in its fundamental nature the act of interpretation remains one and the same.

It is obvious that this definition of intelligence bears a striking resemblance to the second view which, as we have seen at length in the preceding chapter, Bergson holds and which from time to time he surreptitiously identifies with his own intuition. And, as thus defined, the Bergsonian *intuition* and the Hegelian *notion* are in essence one and the same theory. Both involve the conclusion that knowledge in its farthest reaches transcends the categories of mechanism, that knowledge, *intellectual knowledge*, is something other than the abstract understanding with which Kant identifies it in the *Critique of Pure Reason*. According to both views, knowledge is a process of interpretation within experience whose function is the systematic organization of experience,

the nature of the principles employed in this organization depending upon the nature of experience itself.

The difference between this interpretation of the Bergsonian intuition and the view of intelligence which has emerged from our survey, thus, reduces largely, if not entirely, to a difference in terminology. Shall we call this process of experience, this *knowledge*, by the name of thought or of intuition? It must be either the one or the other, and it must be the same throughout experience, since, on Bergson's own admission—if we take his second view of intuition as representing him,—there is no break in the process from beginning to end. So far as I can see, the answer to this question is just about as important as the question itself; so long as the fundamental facts are kept clearly to the fore, the answer is largely a matter of indifference. The important point to keep clearly before us is that the type of knowledge which gives us whatever insight into the nature of reality we may possess is, as a matter of actual fact, of a piece with the type of knowledge which gives us whatever information we may have of what we are pleased to call the scientific world: knowledge is not two, but one. Whether you call this type of knowledge 'intuition,' as Bergson does, or whether you call it the 'notion,' as Hegel does, or whether you follow the multitude and speak of it as thought or reason, is a matter of no fundamental importance so long as the essential nature of the knowledge in question is not forgotten.

or lost sight of in the midst of our verbiage. Terms are not what we are fighting over, and it would be a pity to permit words to divide colleagues into hostile groups.¹ Knowledge is one in science and philosophy; this is the fact. Bergson has not escaped from it; nor have any other theorists who are unwilling to confess, openly or tacitly, that their philosophical views are purely subjective and lack, in consequence, universal significance. Whatever difference there may be between science and philosophy, at any rate it is not to be found in radically different, even though supplementary, kinds of knowledge.²

¹ A remark which Hegel makes in his discussion of the 'faith' philosophy of Jacobi is so much to the point here it must be quoted. "We believe, says Jacobi, that we have a body,—we believe in the existence of the things of sense. But if we are speaking of faith in the True and Eternal, and saying that God is given and revealed to us in immediate knowledge or intuition, we are concerned not with the things of sense, but with objects special to our thinking mind, with truths of inherently universal significance. . . . Intuition and belief, in the first instance, denote the definite conceptions we attach to these words in our ordinary employment of them: and to this extent they differ from thought in certain points which nearly every one can understand. But here they are taken in a higher sense, and must be interpreted to mean a belief in God, or an intellectual intuition of God; in short, we must put aside all that especially distinguishes thought on the one side from belief and intuition on the other. How belief and intuition, when transferred to these higher regions, differ from thought, it is impossible for any one to say. And yet, such are the barren distinctions of words, with which men fancy they assert an important truth: even while the formulæ they maintain are identical with those which they impugn" (*Enc.*, section 63; English translation, pp. 124–125).

² For a very illuminating and suggestive discussion of this general problem of the relation between science and philosophy, as well as

With this conclusion the main purpose of the present chapter has been accomplished. Bergson's inconsistency, which was exposed at length in the preceding chapter, has been explained. In point of fact, the 'intuition' which he from time to time tacitly assumes and which gives to his results what there is in them of real significance is really an *intellectual intuition*, being nothing more nor less than judgment. In point of theory, his intuition and judgment are radically different processes, even contradictory forms of knowledge, the former giving us philosophy and the latter giving us science. If one inquires why Bergson seems unwilling to make explicitly the simple and, one would suppose, helpful admission that intuition is after all only a more concrete expression of intelligence,—an admission which he is compelled tacitly to make,—the answer which inevitably and irresistibly suggests itself is that he is confusing words with ideas, symbols with the facts symbolized. But whatever may be the reason, the confusion is there; and when once it is cleared away, there is disclosed the fact that Bergsonism is either subjectivism pure and simple or its fascinating novelty is only a sham and a delusion.

the problem of the nature of intelligence as it is manifested in the creation of categories, the reader will do well to consult the first two essays in the book, *Essays in Philosophical Criticism*, above referred to.

CHAPTER V

THE PROBLEM OF DURATION

UP to this point in our discussion we have been concerned with the epistemological problem which is raised by Bergson's doctrine of intuition. We have seen what that doctrine is and have exposed its inconsistencies and vagueness. We must now turn our attention to the view of reality which the intuitive point of view is said to imply. To the fundamental problem of metaphysics, How is the nature of reality to be defined? Bergson has offered what purports to be a very novel solution. But upon investigation it turns out to be a solution which is confused in statement, involving as it necessarily does the confusion into which the author falls in his epistemology; and when the confusion is cleared away and the essentials of the new solution clearly defined, it loses much of its novelty—though none of its suggestiveness.

In our study of this Bergsonian solution of the ontological problem we shall first turn our attention to the psychological side of the question and notice the facts which are said to support the position; these, we shall discover, are inadequately described and really force us into a position in some respects radically different from that for which Bergson con-

tends. Then, in the next chapter, we shall follow our author in his criticism of finality; here, once again, we shall see into what difficulties his epistemological vagueness leads him, for we shall discover that his objections to finalism hold only of a very special and abstract type of teleology—a type which really belongs to the eighteenth century. Finally, we shall suggest, in place of his conception of creative evolution, another conception which we shall designate *creative finalism* and which we shall try to show is more nearly in harmony with the basic principles brought to light by our discussion.

I

The opening sentence of *Creative Evolution* is as follows: “The existence of which we are most assured and which we know best is unquestionably our own, for of every other object we have notions which may be considered external and superficial, whereas, of ourselves, our perception is internal and profound.” And from this fact it naturally follows that the strategic point of departure in our undertaking to solve the problem of real existence is a painstaking analysis of our own conscious experience. Conscious existence is a privileged case in which we may confidently expect to discover the precise meaning of the word ‘exist.’

One of the first features that strikes us when we turn our attention to consciousness is its mutability, its fluidity. It is a perpetual flux; there is, appar-

ently, nothing static about it. State follows state with bewildering rapidity; in fact, the various so-called states are themselves nothing but processes which flow on with a never-ceasing rhythm. In consciousness I can find nothing fixed: I discover that "I pass from state to state. I am warm or cold, I am merry or sad, I work or I do nothing, I look at what is around me or I think of something else. Sensations, feelings, volitions, ideas—such are the changes into which my existence is divided and which color it in turns. I change, then, without ceasing."¹

Now change presupposes time. It is, in fact, just the manifestation of the work of time. The attempt to define change apart from any consideration of time involves a manifest contradiction. Consequently, to be conscious, at least in the sense in which human individuals are conscious, is just to be in time. Hence it follows that, so far as conscious experience is concerned, existence is essentially temporal in its nature; conscious existence means perduring from moment to moment within the stream of time. But what is time? And how does consciousness exist within the temporal stream? These are questions which must be answered before we can hope to gain much light on the problem before us.

But to answer these questions, our analysis of conscious existence must penetrate yet more deeply into its secrets. A more careful survey discloses the fact that consciousness presents two fairly distinct

¹ *Creative Evolution*, p. 1.

aspects. There is, in the first place, that characteristic of conscious experience which is directly or indirectly traceable to perception and which we may, for convenience, call the superficial self. In the second place, when we live more intimately in our inner being, as when, for example, we are intent upon the solution of some problem or interested in the accomplishment of some task, conscious experience discloses other and deeper characteristics; this aspect of consciousness we may call the deeper self. Let us notice more carefully each of these two selves.

Beginning with what we have called the superficial self, we notice that this is the self with which we are identified most of the time. All we have to do in order to experience this self is to open our eyes and look about upon the world around us, or to recall some such former experience. The contact of our bodies with the external order of things and the operation of our minds with reference to this external order give us conscious states, which are elements within the life of the self of which we are now speaking. Our sensations and perceptions, our memories and associations, the conscious states, in short, that owe their existence to the exigencies of our physiological and practical life—all belong to it. In this self “we live for the external world rather than for ourselves; we speak rather than think; we ‘are acted’ rather than act ourselves.”¹

It is of very great importance, in connection with

¹ *Time and Free Will*, p. 231.

our present quest, to observe that the conscious states composing this external and superficial self are more or less mechanically and accidentally related to each other. State follows state, idea suggests idea, object calls up object, in a sort of haphazard and arbitrary manner. My idea of the bridge, for example, arouses the image of the stream, and this, in turn, is followed by memories of the picnic crowd, the baseball game, and the intense heat of the day when these experiences took place. Here the various elements of the total experience, while merging into each other to some extent, are nevertheless recalled as numerically distinct and as more or less accidentally connected; they are external to each other, despite the fact that they constitute a unified whole. The reason for this externality of elements in the superficial self is not far to seek. These elements come from the spatial order, and bear upon them the ineradicable marks of their origin. Because the bridge and the stream and the crowd and the game occupied different portions of space when they were first experienced, they are now recalled as if they were spatially related in my present experience of them: they are numerically distinct. Thus, the superficial self, being composed of elements that are received through contact with the spatial order, takes on the unique features of that order, namely, numerical distinctness and externality of parts: the successive mental states come and go, mutually external like their objective counterparts. "Our

ego comes in contact with the external order at its surface; our successive sensations, although dissolving into one another, retain something of the mutual externality which belongs to their objective causes; and thus our superficial psychic life comes to be pictured without any great effort as set out in a homogeneous medium.”¹ The superficial self, then, is quasi-spatial because of the spatiality of the objects which it pictures forth and represents.

And just here emerges a consideration of the greatest moment. The time in which this superficial and quasi-spatial experience exists is a quasi-spatial time; it is made up of parts, it is only a series of instants that are numerically distinct from each other like the elements of the self whose existence it defines. But such a conception of time is a spurious idea; it is not real time. Time viewed as a homogeneous medium is more nearly akin to space than it is to real time. In fact, time “understood in the sense of a medium in which we make distinctions and count, is nothing but space.”² Time conceived in this manner, as homogeneous and reversible, is unreal.³

From this it follows that an analysis of the nature of the superficial self cannot assist us in our efforts to define the term ‘exist.’ We have already seen that to exist means to be in time; but, since the external self does not exist in real time, further

¹ *Op. cit.*, p. 125.

² *Ibid.*, p. 91.

³ *Ibid.*, pp. 98–99.

acquaintance with its nature promises nothing in clarification of our definition. We must turn, then, to a consideration of the other aspect of conscious experience which we have above referred to as the deeper self. The time in which this self exists must be real time, and its existence real existence. What are its fundamental characteristics?

This deeper self, of which the other self is the ‘social representation,’ the ‘external projection,’ we glimpse but rarely and then only by profound introspection. We are so much taken up by the affairs which concern our bodily existence, that the underlying current of our consciousness for the most part escapes our observation. Homogeneous time

Like a dome of many-colour'd glass
Stains the white radiance of eternity.

But the pure ego, the real self, is there; and it is discoverable if only we purify and clarify our vision so that we may behold it. In the dream consciousness, when sleep, “by relaxing the play of the organic functions, alters the communicating surface between the ego and external objects,” we have an immediate experience of this self which is hidden so deep within the externalized ego.¹ In our waking life also we find outcroppings of the same deep-lying self. “Whilst I am writing these lines, the hour strikes on a neighbouring clock, but my inattentive ear does not perceive

¹ *O.p. cit.*, p. 126.

it until several strokes have made themselves heard. Hence I have not counted them; and yet I only have to turn my attention backwards to count up the four strokes which have already sounded and add them to those which I hear.”¹ That self which we experience, thus, within ourselves so to speak, when we are not in a practical and efficient relation to the external order, is the deeper and basic self. What, now, are its differentiating features?

For our present purpose, it is perhaps sufficient to state explicitly only one of these characteristics. In this deeper self we do not find anything resembling the externality of elements which, as we have just seen, characterizes the superficial self. On the contrary, there is here an indissoluble and indistinguishable interpenetration of parts which can be defined only as a ‘qualitative multiplicity’ as opposed to the quantitative multiplicity of the external self, and which cannot be represented by any spatial symbols. “The deep-seated self, which ponders and decides, which heats and blazes up, is a self whose states and changes permeate one another and undergo a deep alteration as soon as we separate them from one another in order to set them out in space.”² The interpenetration of the parts and changes of this deep-seated self may be illustrated by the cumulative experience of the sounds of the bell-strokes already mentioned. If I question myself

¹ *Op. cit.* p. 127.

² *Ibid.*, p. 125.

closely concerning the nature of this experience, "I perceive that the first four sounds had struck my ear and even affected my consciousness, but that the sensation produced by each one of them, instead of being set side by side, had melted into one another in such a way as to give the whole a peculiar quality, to make a kind of musical phrase out of it. In order, then, to estimate retrospectively the number of strokes sounded, I tried to reconstruct this phrase in thought: my imagination made one stroke, then two, then three, and as long as it did not reach the exact number four, my feeling, when consulted, answered that the total effect was qualitatively different. It had thus ascertained in its own way the succession of four strokes, but quite otherwise than by a process of addition, and without bringing the image of a juxtaposition of distinct terms. In a word, the number of strokes was perceived as a quality and not as a quantity. . . ."¹ In such an experience there is nothing resembling the externality of parts which we have seen to be characteristic of the states constituting the superficial and quasi-spatial self.

Thus the time in which this deeper self lives is fundamentally different from that which is predictable of the spatialized self. We are here confronted by "the form which the succession of our conscious states assumes when our ego lets itself live, when it refrains from separating its present state from its

¹ *Op. cit.*, pp. 127-128.

former states.”¹ In such a form of succession “succeeding each other means melting into one another and forming an organic whole.”² Time, as thus defined, is not a mere series of mutually external and reversible instants; it is rather one whole, whose moments are irreversible and mutually interpenetrating. In a word, the time which is predicable of the deep-seated self is not homogeneous time but real time—*duration*; it is the “heterogeneous duration of the ego, without moments external to one another, without relation to number.”³

With this discovery before us, we are now in a position to answer the question with which we began: What does existence mean? Our answer is, Existence means duration. So far as conscious experience throws light on the subject, to exist means to endure, to persist in heterogeneous duration. For a conscious being to exist is to change, and to change is to endure—such is Bergson’s answer to the fundamental problem of metaphysics.

II

Since duration is such a basic category in the Bergsonian *Weltanschauung*, its nature must be carefully examined if we would evaluate the system. To say that with this conception stands or falls much of what Bergson has written on metaphysical questions is not

¹ *Op. cit.*, p. 100.

² *Ibid.*, p. 128.

³ *Ibid.*, p. 108.

an exaggeration. The remaining pages of this chapter will be devoted to a critical examination of the conception. We shall, first, make a further examination of the characteristics of duration upon which Bergson lays particular emphasis; and, next, we shall attempt to estimate the accuracy of the definition which he presents.

In *Time and Free Will* we find it stated that duration is "a qualitative multiplicity, with no likeness to number; an organic evolution which is yet not an increasing quantity; a pure heterogeneity within which there are no distinct qualities."¹ The point of chief interest in this definition is the emphasis which it places on the 'pure heterogeneity' of duration, a characteristic which, from the number of times it is reiterated by the author, one would be justified in regarding as basic. Now from this pure heterogeneity of duration follow certain other features, two of which appear to be of crucial importance.

The first of these is that duration as thus defined can be predicated only of a process which continuously emerges in the absolutely new. An enduring process must *ipso facto* be purely heterogeneous, and a purely heterogeneous process cannot in any sense be homogeneous; but a non-homogeneous process is a process of absolute creation. This consequence Bergson himself not only recognizes, but insists upon. "The more we study the nature of time," he tells us, "the more we shall comprehend

¹ P. 226.

that duration means invention, the creation of forms, the continual elaboration of the absolutely new.”¹ In yet another passage we are informed that, if we plunge back into our deeper spiritual life and identify ourselves with the deep-seated ego, we find ourselves in a “duration in which the past, always moving on, is swelling unceasingly with a present that is absolutely new.”² Other passages from *Time and Free Will* and *Creative Evolution* might be quoted to the same effect. But it is obvious that such a position is logically forced upon one who maintains that duration is pure heterogeneity: a heterogeneous process must perforce issue in the absolutely new.

The second consequence which follows from the heterogeneity of duration is the fact that the process of which it is predictable is such that it is essentially unforeseeable in its onward development. Before such a process omniscience itself would stand dazed and helpless; what is to be the result of it cannot possibly be known, for it cannot have a *result*. This consequence, once more, our author emphasizes. “Our personality,” he says, “shoots, grows and ripens without ceasing. Each of its moments is something new added to what was before. We may go further: it is not only something new, but something unforeseeable. Doubtless, my present state is explained by what was in me and by what was acting on me a moment ago. In analyzing it I should find no other elements.

¹ *Creative Evolution*, p. 11.

² *Ibid.*, pp. 199–200.

But even a superhuman intelligence would not have been able to foresee the simple indivisible form which gives to these purely abstract elements their concrete organization. For to foresee consists of projecting into the future what has been perceived in the past, or of imagining for a later time a new grouping, in a new order, of elements already perceived. But that which has never been perceived, and which is at the same time simple, is necessarily unforeseeable. Now such is the case with each of our states, regarded as a moment in a history that is gradually unfolding: it is simple, and it cannot have been already perceived, since it concentrates in its individuality all that has been perceived and what the present is adding to it besides. It is an original moment of a no less original history.”¹

Duration, then, is heterogeneous. To endure means, to pass on to the absolutely new, and to do this in a manner that is, by its very nature, unforeseeable. This is the fundamental characteristic of the stream of our underlying conscious life. “That each instant is a fresh endowment, that the new is ever upspringing, that the form just come into existence . . . could never have been foreseen . . . all this we can feel within ourselves. . . .”² Such, in sum, is the nature of duration as Bergson’s analysis of conscious experience would seem to define it.

His theory of duration, Bergson feels, is supported

¹ *Op. cit.*, p. 6.

² *Ibid.*, p. 164.

by other weighty considerations. If time is to be thought of as real, he argues in effect, the new must be ever upspringing and the forms that progressively arise must be unforeseeable. Otherwise, time is only a repetition and is in no sense a reality. His own words on the point must be quoted: "The more I consider this point, the more it seems to me that, if the future is bound to *succeed* the present instead of being given alongside of it, it is because the future is not altogether determined at the present moment, and that if the time taken up by this succession is something other than a number, if it has for the consciousness that is installed in it absolute value and reality, it is because there is unceasingly being created in it . . . something unforeseeable and new."¹ Thus Bergson thinks that the view on which he is insisting is basic to the reality of time itself. The issue is definitely joined: either duration is a pure heterogeneity or time is unreal; either conscious existence is a process of elaboration of the absolutely new and unforeseeable or conscious existence is not in real time. But, as we have already seen, the fundamental feature of conscious existence is its temporal nature; if time is unreal the most obvious characteristic of consciousness is a delusion and a cheat.

¹ *Op. cit.*, pp. 339-340.

III

Despite the very careful and detailed analysis of conscious experience upon which Bergson rests his theory of duration, an analysis that is exceedingly illuminating and suggestive, I venture to assert that the theory is inadequate and does scant justice to some of the obvious facts of the mental life. My objections to the theory are chiefly two. The first, an *a priori* objection which by some, particularly by those of the Bergsonian temperament, will hardly be considered a serious objection, is that this conception of duration is by its very nature an irrational conception. Those who see no significance in this criticism may find the second more serious and better worth their consideration. It is that the analysis of conscious experience which Bergson gives in support of his hypothesis is not an exhaustive analysis; it omits from consideration important features of conscious life which, when taken into account, force us to the conclusion that our minds are markedly, yes radically, different from the description which Bergson gives. Let us elaborate each of these objections in turn.

Beginning with the *a priori* objection, I think it is not difficult to discern that, as Bergson defines it, duration is a wholly irrational concept and can be predicated only of a process which is essentially unintelligible. A purely heterogeneous process in which the absolutely and wholly new is constantly

arising, and to which it is as constantly being added, is a process with which reason is totally unable to deal: such a process violates the very law of rationality itself. The fundamental postulate of reason is, I presume, that if there be evolution there must be some sort of homogeneity in it; that if there be a process of change there must of necessity run through the process an element of identity. Change which lacks this continuity, as must be the case if change takes place in the Bergsonian duration, is a process in which the intellect can get no foothold. It is a process before which reason is powerless; it is utterly irrational. In fact, one may well question whether such fluidity could be called a *process* at all: a process certainly is not justly to be identified with a mere series of disconnected instants. If such change is to be understood, it must be somehow 'divined'; certain it is that it cannot be comprehended.¹

Of course, the Bergsonian retort to all of this is obvious. In the first place, we may suppose, it would be pointed out that a connection between the past and present in duration is not only admitted, but emphasized; undoubtedly we should be reminded that duration is conceived as an 'organic whole' in which the past abides in the present 'actual and acting.'² And, in the second place, amazement would certainly be expressed that one should have

¹ See Creighton, "The Notion of the Implicit in Logic," *The Philosophical Review*, Vol. XIX, p. 58.

² *Creative Evolution*, p. 15, and elsewhere.

the temerity to consider the unintelligibility of duration as an incurable defect of the category, when the main purpose of the author's latest work is to show at length just that it is, and why it is, unintelligible. The reply of the Bergsonian, then, would be that our objection may be reduced, on the one hand, to a misinterpretation of the author's view, and, on the other hand, to a complaint that the author has done the very thing which above all else he desired to do.

Our rejoinder to the first part of this reply will be given below when we come to an examination of the facts by which this theory is supported. So, for the present, we may be permitted to pass it by with the statement of it. As regards the second part of the reply, of course it must be admitted that Bergson does insist that duration is an essentially unintelligible conception, and it must be admitted furthermore that for him its unintelligibility is one of its chief attractions. In spite of this, however, I cannot but feel that our objection has a deep and basic significance. The proof of the unintelligibility of a theory seems to me to establish a very strong presumption against its ontological value. That there are doubtless many phases of conscious experience which are as yet unknown and, from the limited point of view of finite minds, at present unknowable must be admitted by all. But it is one thing to say that these are unknown, and it is altogether another thing to say at they are, by their very isolated and heterogeneous

nature, absolutely unknowable: between the two statements lies the whole diameter of rationality. It is difficult to see how, being constituted as we are, we can rest satisfied with the unintelligible and the unknowable: historically we have not done so, and theoretically it would seem we cannot do so. The unintelligible must forever remain in a state of unstable equilibrium, and the theory that supports it must ever rest under the suspicion that somewhere it is seriously in error.

On the basis of such a heterogeneous and, consequently, irrational evolution of the self as Bergson here assumes, both psychology and ethics become inexplicable mysteries, if indeed they do not take on the character of the miraculous. Their past history can only be deemed a fortunate accident, and their future is beset with unforeseen and unforeseeable pitfalls. If the evolution of self-consciousness is such that it is constantly issuing in the totally new, in that which is in no sense real before it becomes an actuality, if there is no sense in which the potential within conscious experience is of genuine worth, then there is absolutely no guarantee in what direction the process of conscious experience may go: it may shoot off at any angle, run up against any sort of obstacle, and link with the past a thoroughly discordant present. Any individual might at any moment become wholly other than he really is, for his whole development is haphazard and irresponsible. How could psychology possibly deal with such

an erratic process? Much more, how could ethics deal with it? Indeed, how could one individual meet another in the commonplace affairs of everyday experience? The fact is that conscious experience existing in pure duration would be of such a freakish nature that no sort of sense, common or scientific, could hope to fathom it. But, fortunately for his theory, Bergson is not consistent with his premises; he puts more into his conception than he is willing to admit is there.

In this connection it is interesting, and perhaps instructive, to notice that Bergson presents various arguments for his conception of duration. His elaborate analysis of conscious experience which we have tried to follow in outline above is for the one purpose of establishing the truth of his view. It is such a theory, he maintains, as will explain the facts of conscious experience. Duration is heterogeneous, we are informed, because each conscious state is an original element in a no less original history; hence arises its unintelligibility. And all of this seems to be disclosed by intelligence itself. But on second thought it seems rather odd that intelligence should be employed to establish the validity of a conception which by definition is not open to the comprehension of intelligence. One instinctively feels that something is radically wrong with such procedure. And it is bootless to contend that *intuition* gives us inside information concerning the nature of that which endures, while intelligence only sets forth in words,

for purposes of social intercourse, the information thus mysteriously and secretly revealed. For it would seem that 'intuition,' isolated from the intellect, could at most give us information concerning the mere brute fact of the several phases which the enduring process presents: only intelligence could discern that the past in its entirety abides in the present, that the present possesses aspects of novelty, that the enduring process is an 'organic whole.' The simple fact is that, if duration is to be regarded as more than a mere unutterable experience such as is a feeling of pleasure, it must submit itself to the mechanism of the intellect. This Bergson in effect admits, because he cannot do otherwise and at the same time talk objectively concerning his view. But how can intelligence be said to manipulate an unintelligible notion? Obviously there is a difficulty here that concerns something of basic importance; and that something is of course the problem of the nature of intelligence itself. The confusion into which Bergson falls here is only another illustration of the confusion in his epistemological views above exposed. Duration is incomprehensible to intellect if intellect is cinematographical in its nature and bound down to the spatial alone; but if intelligence is defined as true intellectualism defines it, then certainly duration is not beyond the scope of the intellect.¹ When

¹ There is thus a very wholesome truth implied in the Bergsonian doctrine that duration is unintelligible. And that implied truth is that conscious experience cannot be adequately explained in

Bergson glories in the incomprehensibility and unintelligibility of reality, he is thinking of intelligence in the former sense; but when he proceeds to argue for his conception of the real and to insist that it is true and so must be accepted, he is tacitly assuming the other definition of the intellect. And, be it noted, it is only this assumption which saves his view from utter subjectivity.

IV

We turn now to the second difficulty which we have noted in connection with this doctrine of duration, namely, that it is based upon an incomplete analysis of conscious experience. And here, it may be said at once, we are face to face with the fundamental and fatal defect of the Bergsonian theory.

A brief summary of Bergson's analysis of conscious-

terms of mechanical categories alone. If duration were intelligible in this sense, then free will, which Bergson, like many others, is anxious to save from the clutches of mechanism, would undoubtedly be out of the question and absolute determinism would hold undisputed sway in the field of psychic phenomena. The future could then be only a repetition of the past, and the past a mere summation of antecedent conditions. To explain conscious existence in terms of mechanism is to eradicate from it all originality and spontaneity. But to deny that consciousness can be adequately described by means of quasi-spatial terms, to insist that one cannot predict conduct as the astronomer predicts an eclipse, is not at all equivalent to the assertion that conduct and conscious experience cannot be brought under the categories of intelligence. As we have already seen, it is a very narrow and abstract view which holds that intelligence is restricted to the lifeless and the inert.

ness will serve us as an advantageous point of departure in our consideration of this difficulty. And the summary can best be given in the author's own words: "In reality, the past is preserved by itself, automatically. In its entirety, probably, it follows us at every instant; all that we have felt, thought and willed from our earliest infancy is there, leaning over the present which is about to join it, pressing against the portals of consciousness that would fain leave it outside. . . . Even though we have no distinct idea of it, we feel vaguely that our past remains present to us. What are we, in fact, what is our *character*, if not the condensation of the history that we have lived from our birth—nay, even before our birth, since we bring with us prenatal dispositions? Doubtless we think with only a small part of our past, but it is with our entire past, including the original bent of our soul, that we desire, will and act. Our past, then, as a whole, is made manifest to us in its impulse; it is felt in the form of tendency, although a small part of it only is known in the form of idea."¹ The point of all this is that conscious experience is fully explained entirely in terms of the past, which is somehow automatically prolonged into the present; and the past which is thus prolonged into the present is simply the cumulative sum of all preceding presents in the history of the individual. We have, thus, a never-ceasing conjunction of the past with the present; but the past is just the old, and the present is totally

¹ *Creative Evolution*, p. 5.

new and unexpected. Hence the heterogeneity and unintelligibility of the process.

Now I respectfully, but confidently, submit that such an analysis of conscious experience does not take into account all of the facts. It lays the emphasis exclusively on the past: all the work of conserving experience and of making it unitary falls on the dynamic memory.¹ Not a word is said concerning the function of what, for want of a better term, we may refer to as the *dynamic imagination*. But the dynamic imagination, one is prone to think, is as essential in the unity of consciousness as is the dynamic memory. Consciousness has a forward-looking as well as a backward-reaching aspect; and no analysis which leaves the former wholly out of account can, in justice, be deemed adequate. Let us follow this point.

Looking at the matter first from the psychological point of view, we must say that every conscious present is nothing more than an act of attention, and that the whole process of conscious experience consists in a series of such acts of attention. And from this it would seem to follow that the psychological problem of consciousness, so far as its persistence in time is concerned, reduces to the problem of the attentive consciousness. Under what conditions does the attentive consciousness exist, and how is one such consciousness linked with preceding and succeeding ones? is, therefore, identical with

¹ Cf. *Matter and Memory*, pp. 89 ff.

the question, How is consciousness as an enduring process to be explained? An answer to this question we must now seek.

In the third chapter of his very instructive book, *Attention*, Professor Pillsbury has developed at considerable length the conditions of the attentive consciousness. In the course of his discussion he answers the question that here confronts us. It is not necessary for us to enter into any detailed summary of his discussion of the problem, but it is to the point to notice that, among the conditions of attention, he finds it essential to mention and to emphasize purposes, both particular and general, both immediate and remote. Not only does the past play an important rôle in the determination of the unique act of attention—this, of course, he admits; but he also insists that these anticipatory tendencies exert an important influence. These, he contends, as it seems to me with indisputable faithfulness to the facts of the case, are indispensable conditions. Every act of attention is the expression of a purpose, either immediate or remote, either in the form of a clearly conceived end or in the form of subconscious tendency; and apart from purpose, in this broad sense, the attentive act can neither be understood nor explained.¹

This point is so obvious, once it is clearly stated, that illustration of it would seem superfluous. Every case of ordinary perception is an illustration. By

¹ See Haldane, *Mechanism, Life and Personality*, pp. 108 ff.

this time it is a fairly old story with the psychologist that perception itself is active, that a man's interests and purposes are largely instrumental in determining even what he shall observe in the world around him; and, it may be added, the more advanced consciousness is, the more marked does this control of purposes become. The artist and the artisan, the sportsman and the man of affairs do not observe the same objects in the museum or at the seashore. We recall the famous case of Sedgwick and Darwin, who while spending many hours in Cwm Idwal, where there were glacial phenomena so conspicuous that, as Darwin later said, "a house burnt down by fire did not tell its story more plainly than did this valley," failed utterly to observe these phenomena—and all because they happened to be interested in a problem which was foreign to the nature of the evidence there disclosed. And what is true of perception is true of every other form of conscious experience where attention is involved, that is to say, is true of every really efficient and genuine consciousness.

And just as purposes are instrumental in determining each and every act of attention, so are they instrumental in linking together the several acts of attention which go to make up what we refer to as the process of conscious life. The purposes which are now potent in my act of attention are also potent in the acts of attention that are to follow this one. The direction which the stream of consciousness shall in the future take is, partly at least, depend-

ent upon the anticipations and aims, purposes and ideals which are now operative within conscious experience. In fact, there is good ground for the assertion that the past is at any moment dynamic in the present only because at one period in its history it was a potentiality, that is to say, existent in the form of an end.

Purposes, then, are really involved in the attentive consciousness: they are determining conditions of it. But purposes are not past, they are future; not in the sense that they at any given present exist in the future, of course, but in the sense that they anticipate the future, set their face forward rather than backward, and, through this anticipatory quality, control the passing 'presents' of conscious experience. And this is true, whether the purposes exist as clearly defined ends or as tendencies only of which we are in no sense clearly conscious. Nor should the objection be raised that this is impossible. If there is no difficulty in accepting the statement of the neurologist to the effect that a nerve-cell by acting now can control future action in which it is concerned, that its present activity does in very truth produce a future effect, then there should be no difficulty in accepting the psychologist's statement that states of consciousness corresponding to these neurological processes can do the same. It is simply a question of what happens, not what is possible. And the fact seems to be that states of consciousness do thus influence states that are not yet, but are yet to

be. There is no paradox here, it is only a statement of fact; an unbiased examination of conscious experience forces a recognition of the fact upon us.

So, from the point of view of psychological analysis, we are compelled to say that conscious existence in time, in other words, duration, cannot be explained solely in terms of the past overflowing into the present. It is true that the past does overflow into the present, but the point is that the past and the present are not the only dimensions of the temporal consciousness. Every present of experience involves purposes; and purposes are not exclusively past or exclusively present, nor yet only partly past and partly present. They are future as well. Hence, every present of consciousness is in some sense both past and future: past, in so far as it is an expression of the dynamic memory; future, in so far as it summarizes and efficiently incorporates within itself the propulsion of anticipatory purposes and ends.

With this statement of the case we might let the matter rest. We have taken the point of view from which our author approaches the problem, and we have discovered that he has omitted from his analysis certain very fundamental aspects of experience that must be taken account of before the problem can be said to be satisfactorily solved.¹ And a theory

¹ If one object to the identification which we have above (p. 118) made of the attentive consciousness and the present of conscious experience, I do not know how to answer him save to ask why the identification should not be made. If the present of consciousness is not an act of attention, then I am at a loss to know what it is.

that rests upon an obviously inadequate analysis must be a false theory, at least it must be one that is not wholly true. But there are other and weighty considerations that point to the existence of this forward-looking aspect of consciousness, and these we must at least suggest before concluding our consideration of this phase of the problem.

In the first place, the very process of knowledge itself is impossible unless experience has this forward-reaching characteristic. "The ends of the logical process, the demand for meaning, which is the essential nature of the logical mind, is functionally operative at every stage of development, so that each prior stage of experience, as representative of those ends, is connected through identity with the later."¹ And apart from this identity between the earlier and later stages of experience, the development of a continuous cognitive consciousness, a consciousness pregnant with meaning, becomes an inexplicable mystery.

And if the succession of instants which compose the one temporal whole of the conscious life is not the series of the different attentive acts, then I do not know how it can be defined. At any rate, the duration which Bergson is discussing would seem to be that experience which we have when attention is intensest—except, of course, in those cases where he refers to those more or less abnormal lapses which can hardly with justice be identified with our profounder selves. Certainly, in a case like that of listening to the poet's verses, or of grasping a musical phrase, the consciousness in question is the attentive consciousness. And instances like these are the ones which Bergson usually has in mind.

¹ Creighton, *op. cit.*, p. 61. If the reader is inclined to forget that a state of consciousness is more than a mere psychic event in the stream of consciousness, I would refer him to this discussion of the problem of the 'implicit.'

But this identity is always forward-reaching in its nature; it is never merely a summary of the past. If there is no problem, certainly there is no thought; and a problem is nothing more nor less than a directing end or ideal. A satisfactory theory of knowledge must be written in teleological terms.

Once more, the ethical consciousness is indicative of the same thing. The basic characteristic of moral experience, the very spring of morality itself, namely, the feeling of moral obligation, is in the last analysis nothing but the discrepancy which exists between the self that now is and the self that ought to be. And this means that moral experience is through and through teleological. It is hopeless to attempt to explain a moral character without consideration of the purposes that are present in moments of moral decision. It may be, and doubtless frequently is, the case that such purposes are not conscious in the sense that they are explicitly recognized by the agent in the moments of conflict and indecision; they often are, as Bergson rightly urges, hidden in the depths of the soul and only on occasion heat and blaze up with compelling power. But the all-important fact that they are present in experience, even though submerged below the surface of the stream, and that they are potent in shaping the course of conduct—this fact must be borne in mind when we come to theorize about the *modus operandi* of moral experience. Otherwise, we are confined within the too narrow limits of a strict mechanical determinism or left to

the tender mercies of a purely negative and hopelessly dark theory.

Finally, the experience of duration itself, as *duration* and not as a mere series of successive and disconnected instants, is inexplicable if the aspect of consciousness we are arguing for is not admitted. The proof of this which Kant has given us in the famous "Transcendental Deduction of the Categories," and which has been repeated with variations by many thinkers since his day, has not, so far as I am aware, been shown to be false. How time could possibly be continuous, a qualitative succession in which each new moment springs out of the past without a break, it is impossible to say unless somehow the past reaches out into the future and anticipates what it is to bring by way of addition to the present that now is. As Green has said, and has well said, "We must be on our guard against lapsing into the notion that a process *ad infinitum*, a process not relative to an end, can be a process of development at all."¹ We might add that such a process could not be a *process*, a continuous process, at all; from the standpoint of a consciousness existing through it it could be at most a disconnected series of instants, and not a succession possessing genuine continuity experienced as such. That we may have a continuous experience in time, the past and the present must be organic to each other; and this is possible only provided the principle which makes them organic to

¹ *Prolegomena to Ethics*, p. 126.

some degree at least overreaches the future. Bergson is right: if time is real and not a mere repetition of an endless monotony, then the future must be open. But we are compelled to add: if time is real as a unity and not as a bare succession, the future cannot be wholly indeterminate.

V

If what we have been urging in the preceding section is true, conscious duration must be more than mere memory overflowing into the present, more than the cataract of that which has been experienced tumbling headlong into the midst of that which is now being experienced. As an experienced fact, duration is a meaningless conception unless consciousness admittedly possesses a forward-reaching aspect which gives to it its unity and continuity.

Bergson himself, though verbally denying the point which we have been urging, really assumes it throughout his discussion of duration. A few examples will justify this accusation. In a passage already quoted Bergson says that our past is "made manifest to us in its impulse," that it "is felt in the form of tendency." If meaning is put into these words, and if it be admitted that they truly describe the fact, then the characteristic of consciousness which we have been emphasizing and which Bergson is prone to deny must be accepted. Consciousness as tendency is certainly more than consciousness as past history; it involves an end, or 'tendency' here has no meaning.

Again, we are told that duration is truly experienced by us if, when listening to a poet reading his verses, we enter into his thought and do not content ourselves with attending merely to the form in which he clothes his ideas.¹ Though Bergson seems to think differently, it is obvious to my mind that such an experience as is here suggested is impossible unless the memory involved in the experience has imagination operative in it. When I follow the poet's thought I certainly do more than simply remember the thoughts which he has already expressed: I do more than add these thoughts to the ones now being expressed; my experience is surely something other than the mere successive summation of the ideas to which the poet gives expression in the passing moments of the recital. If this were not the case, I could nowise enter sympathetically into the poet's thought—at most, I could give him a respectful hearing by making an effort to appear interested in what he was saying. If I really appreciate his mood, however, I must, besides remembering what has preceded, anticipate what is to come; in fact, my memory of what has preceded is vitally connected with this anticipation of what is to come, and they can be separated from each other only verbally. I hold in abeyance what I have heard until its meaning is completed by what is to follow; until the context is supplied, the context which I am now by my feeling

¹ *Creative Evolution*, p. 209. The same illustration occurs elsewhere.

of incompleteness more or less clearly anticipating, what I have heard remains fragmentary and incoherent. Thus Bergson once more assumes the point he is anxious to deny, and, we may assert, he must assume it if his words are to have any point at all. In yet another passage, he tells us that consciousness "shoots, grows and ripens without ceasing,"—an idea that is repeated over and over again. But, surely, if the words here used are anything more than meaningless metaphors, conscious experience must be in some real sense anticipatory. It might possibly 'shoot' blindly—though how such promiscuous 'shooting' could be regarded as an organic change is far from clear,—but how it could 'grow' and 'ripen' blindly one cannot know. The very words here used in the description of consciousness imply beyond a peradventure that it is a teleological process, especially when we recall the fact that we are constantly urged by the author to regard the past as an 'organic whole' which is 'actual and acting' in the present. In yet another connection, duration is defined as "the continuous progress of the past which gnaws into the future and which swells as it advances."¹ But it is all important to remark that the 'gnawing' of a toothless past must of necessity be without result; and that unless the past and future are really connected, unless, that is to say, the future is in some very real sense contained in the past, the 'swelling' of the latter is wholly without

¹ *Op. cit.*, p. 4.

justification—it is not a natural growth. Such passages as these might be paralleled by numerous others, but it is perhaps useless to swell the list. Whether Bergson makes the assumption we here accuse him of or whether he does not is of no great concern, except in so far as it might be said to be indicative of the fact that in order to speak intelligibly concerning conscious experience teleological terms must be used. I should hold it to be unquestionably true that "for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly."¹ But I should hold it to be equally true that endless 'creation' of oneself by 'maturing' is a meaningless jumble of words, except that which is 'created' be, in point of actual fact, the explication and elaboration of that which is to 'mature.'

So, in answer to the above suggested reply to our criticism, namely, that Bergson admits and insists upon the fact that the past in its entirety and as an organic whole actively abides in the conscious present, we are compelled to say that this very admission is forced upon him by facts which he only tacitly recognizes, and against the logic of his position, since it involves the consequence that duration cannot be purely heterogeneous, that the future must be operative in the present, and that to separate them and identify the future with the totally new is a vicious abstraction. It is absurd and contrary to fact to

¹ *Op. cit.*, p. 7.

say that the past is actual and acting in the present unless the present in which the past is actual and acting is organic to that past: this Bergson rightly urges. But it is equally absurd and contrary to fact to contend that the future could ever become organic to the present, could ever so unite with the present as to make of it, later, an organic element within the past, unless it already is functionally involved in the present and the past: this Bergson wrongly refuses to admit.

VI

We conclude, then, that the analysis upon which Bergson bases his conception of duration is an inadequate analysis. It leaves out of account that aspect of consciousness by means of which the psychologist explains any present of conscious experience as well as the continuity of the several presents which compose the stream of the mental life, apart from which both cognitive and ethical experience are inexplicable, and in terms of which even the experience of duration itself must be defined. This anticipatory aspect of consciousness must be included in our analysis, or one fundamental characteristic of conscious experience is ignored.

When we supply this omission from our author's analysis, we are compelled to introduce into the definition of duration an element that is abhorrent to him. For we must define duration teleologically. It ceases to be a pure heterogeneity, and becomes the

elaboration of a growing and ripening homogeneity; the past is never merely old, nor is the present ever utterly new. Finite consciousness is seen to be more than a summation of entirely past experiences constantly merging into the future which is wholly foreign to them. On the contrary, it is a personal existence which, though in time, is forward-reaching in its nature, though itself subject to never-ceasing change, is not wholly blind and undirected in its changes. One essential characteristic of it would now seem to be its teleological nature, its tendency to become, not just anything, but *itself*. And this, we must admit on sober reflection, is the case. The dynamic imagination is as fundamental to conscious existence as is the dynamic memory. Ideals certainly play a no less significant rôle in character than habit: in fact, the latter is just the former inverted.

CHAPTER VI

CREATIVE FINALISM

IN the preceding chapter we have considered the conception of duration as Bergson defines it and we have arrived at the conclusion that his definition is inadequate, its inadequacy being due to the fact that it fails to do justice to what would appear to be one fundamental aspect of conscious experience as an enduring process. There is another side to the question, however, which we have not yet touched upon. We have seen that duration must be predicated of reality; the universe, we have learned, endures.¹ To deal with the problem of duration completely, therefore, we must describe the nature of reality as enduring. How are we to think of the duration of the universe? is a question which the problem of duration involves and a question which we must now consider.

In the light of our discussion above, the general answer to the question would appear to be fairly obvious. If reality is to be conceived as enduring, then it naturally follows, since duration is defined on the basis of the facts of conscious experience, that the real exists after the analogy of conscious experi-

¹ Cf. *Creative Evolution*, pp. 11, 217, 272, etc.

ence. Now the discussion of the preceding chapter has brought us to the conclusion that conscious experience is through and through teleological; and so we are apparently forced to explain the world in some sort of teleological terms. And from this position we should naturally pass on to a consideration of the nature of the end or ends in terms of which the world-process is to be defined, and to an inquiry as to how this end or these ends may be said to be operative in the process. But Bergson flatly denies that a teleological explanation of the world process is permissible, particularly if that process is such that duration is predicable of it. Consequently, we must first pause to consider the reasons why our author feels compelled to take issue with the conclusion here presented. And this brings us to a consideration of the problem of finality.

I

The fundamental objection which Bergson raises to the teleological explanation of the world is that it makes time unreal. He insists that reality must be such that "the portals of the future remain wide open" before it.¹ But teleology closes these portals and locks them fast: the process which it defines is a process which is held in the iron grip of unrelenting necessity. To say that the world-process is nothing but the realization of a predetermined plan, as teleology does, is—so the objection runs—to make of the

¹ *Op. cit.*, p. 105.

temporal series only a sham reproduction of that which already is somehow eternally realized, perhaps in an absolute experience. Teleology, thus, presupposes that all is given; and, in consequence, it suffers from the same fatal defect that vitiates the mechanistic hypothesis. The world which it posits is static and barren, the most unreal and uninteresting of imaginable worlds: it gives us nothing but a block-universe to which change and novelty are strangers.

The first point of interest to us in connection with the objection which our author here raises is the type of teleology he has in mind. He is frankly thinking of that sort of finalism which conceives of the world-process as the reproduction of a cut and dried plan. Finality, we are explicitly informed, "says that the parts" of the world "have been brought together on a preconceived plan with a view to a certain end. In this it likens the labor of nature to that of the workman, who also proceeds by the assemblage of parts with a view to the realization of an idea or the imitation of a model."¹ There is no mistaking the meaning of this. Reality, as teleological finalism defines it, is a process which steadily and unswervingly pursues a clearly defined and an unchanging end.

If we surrender mechanism as an impossible hypothesis—as it would seem we are compelled to agree we must,—then the choice, Bergson thinks, is

¹ *Creative Evolution*, p. 88. See also pp. 39, 45, 51, 104–105, 127, 223–224.

between the above conception of finalism and his own peculiar view of creative evolution which, though a sort of finalism, still leaves room in the process for genuine development in time. That view is, in sum, this: the world is the expression of one principle, and so is a unitary and harmonious whole. This principle, however, is a push from behind rather than a pull from before, an impulsion rather than an attraction. Hence the harmony in the world is not perfect; indeed it exists in principle only and not in fact, since there may be as much confusion and discord as happens to be necessary in the progressive differentiation of this original impulse into its various individual forms. "Thus the wind at a street-corner divides into diverging currents which are all one and the same gust." There is, then, a type of finalism in the world, but it is due to "an identity of impulsion and not to a common aspiration."¹

Presumably there can be no question that teleological finalism, as Bergson above defines it, must be given up. Such a theory of reality, if it was ever seriously held, has certainly served its day. Bergson is right in urging against it that it makes time unreal. If future events are already realized in an eternal and absolute consciousness which entertains as an actual experience the whole plan of the world-process then it is fairly obvious that the future, as *future*, is of no real significance. From the standpoint of such a consciousness undoubtedly 'all is given';

¹ *Op. cit.*, pp. 51 ff.

sub specie æternitatis, all that is is now. Assume that the world-process is only the working out of a pre-determined plan, that the ‘divine event’ towards which the whole creation moves is already in very truth an *event*, that the process of evolution is nothing but the imitation of a model—assume this, and you have reduced the temporal series to a monotonous and useless repetition of that which is real without it. Surely a static reality cannot be reconciled with a dynamic world: the only conclusion which can consistently be drawn by a theory which holds such a view of the real is that the dynamic world is *ipso facto* unreal. But if this is so, then we are also unreal: our struggles are useless, our moral efforts are vain, and the round of hours and days which to us seems so real is, with all its joys and sorrows, its hopes and fears, its realizations and disappointments —nothing.¹

But having repudiated this sort of finalism as barren and abstract, we are not necessarily caught in the clutches of the Bergsonian disjunction. Between the extremes of a finality which would reduce the world-process to an impotent reproduction of an eternally fixed plan, on the one hand, and Bergson’s own view of the world-process as the aimless evolution of an original impetus which, as it advances blindly differentiates itself into equally blind tendencies, on the other, there is possible a third con-

¹ Cf. Lovejoy, “The Obsolescence of the Eternal,” *The Philosophical Review*, Vol. XVIII, pp. 483 ff.

ception of finality which is more nearly in keeping with the facts of conscious experience. This third and more concrete view it is the purpose of the present chapter to elaborate.

Before undertaking a statement of this view, however, it is necessary to say a word concerning the basis of Bergson's disjunction. It is based directly upon the first of the two conceptions of intelligence which we have discussed above, for it assumes that intelligence deals only with spatial categories and is wholly separate from the function of mind which is ordinarily called volition. Once this separation is made, the disjunction follows with unmistakable certainty; but if the separation is false, if intelligence is not confined to spatial categories, then the disjunction falls of its own weight. We have already argued the inadequacy of Bergson's conception of intelligence, but we have as yet said nothing explicitly concerning his view of the relation between will and intelligence. A consideration of this point, which we have reserved until now as basic to the present argument, will aid us in further exposition.

II

That Bergson does separate the will from the intellect, treating them as if they were independent of each other, is an assertion the truth of which cannot successfully be called in question. His whole discussion of the vital impulse and its operation in the evolutionary process assumes such a separation

and loses much of its meaning when this assumption is brought to light and the error involved in it is exposed. The entire point of his objection to teleology is that this theory is a product of the intellect and therefore does not touch the dynamic force of life: the intellect is a "motionless and fragmentary view of life," it naturally "takes its stand outside of time;" life, on the contrary, "progresses and endures in time."¹ Intelligence and the dynamic force of life are thus very different principles; indeed, they are so widely different that they never touch each other at all. But the dynamic force of life, we cannot but assume, is what we usually mean by will in our own experience; at any rate, our own will is regarded as the 'prolongation' of the original impulse from which intelligence is hopelessly sundered.²

But we are not here reduced to the necessity of simply referring to the author's tacit assumptions in our efforts to justify our accusation. The separation between will and intelligence is explicitly put and emphasized. "A conduct that is really our own," we read in one place, "is that of a will which does not try to counterfeit intellect, and which, remaining itself—that is to say, evolving—ripens gradually into acts which the intellect will be able to resolve indefinitely into intelligible elements without ever reaching its goal. The free act is incommensurable with the idea, and its 'rationality' must be defined

¹ *Creative Evolution*, p. 51.

² See particularly *Creative Evolution*, p. 239.

by this very incommensurability, which admits the discovery of as much intelligibility within it as we will. Such is the character of our own evolution; and such also, without doubt, that of the evolution of life.”¹ In another passage we are informed that our consciousness is naturally inclined to look backwards. “This retrospective vision is . . . the natural function of the intellect, and consequently of distinct consciousness. In order that our consciousness shall coincide with something of its principle,” that is to say, in order that it may come into touch with reality, “it must detach itself from the *already-made* and attach itself to the *being-made*. It needs that, turning back on itself and twisting on itself, the faculty of *seeing* should be made to be one with the act of *willing*. . . .”² In a word, intellectual activity and voluntary activity are two radically different experiences, so different that the former has no part or lot in the latter. The only relation between the two is an accidental and external one. It is true that the intellect may dissect and analyze the results that flow from volition, it may perhaps even set the problem for voluntary conduct; but the significant point is that intelligence can touch volition only superficially. There is nothing like an organic connection between the two: the process of volition, in its unique and real nature, is wholly free from contamination by the activity of intelligence. In

¹ *Creative Evolution*, pp. 47–48.

² *Op. cit.*, p. 237. See also the following discussion.

their ultimate essence the two experiences are fundamentally distinct; one is turned towards reality and the other away from it.

Now when this separation between will and intellect is assumed as valid, the above disjunction is inevitable. If the will is the dynamic force in the evolution of life which, by its very nature, lies beyond the ken of the intellect, if the intellect is such that it can secure only external, static and, therefore, unreal glimpses of the process of which will is the 'prolongation' and into the very heart of which will enables us to enter, then the disjunction concerning the world-process with which we are now confronted is inevitable. Either it is a process which is intelligible, or it is a process which transcends the powers of intelligence. If the first alternative is true, the evolution of the world can be nothing more than the realization of a pre-existing plan, the imitation of a static model; in the latter event, the process can only be one in which the impulsion from behind is without a goal and without direction—at any rate, without an intelligent, and consequently discoverable, direction. In short, the evolution of life is either a creative evolution whose only unity is a *vis a tergo*, blind and irresponsible, or it is a radical and mechanical finalism which is fatalistic in its unyielding pursuit of its end. There is no third possibility.

But the question is still open whether such a sharp separation between will and intelligence is permissible. I submit that it is not. Of course, the old theory of

will, as a special faculty whose sole function in experience is to pull the trigger at the opportune moment and set off the appropriate movement, has long since been given up. On the contrary, contemporary psychology is inclined to identify will with the whole mind active. Külpe's definition may be taken as typical: will is "the expression of the totality of previous experiences, in all the degrees of authority and consequence which they have acquired in accordance with universal psychological laws, and with all the weight of influence which distinguishes the old and proven from the new and strange. It is for the most part but a small and fragmentary measure of this that finds its way into consciousness: the reserve of energy which gives efficacy to the will lies below the conscious limen."¹ And this comprehensive definition we accept all the more readily here inasmuch as it appears to be identical with the view of will that Bergson holds when he urges that "it is with our entire past, including the original bent of our soul, that we desire, will and act." Will, then, we say is the process by means of which conscious experience in its totality is created.

Now what is involved in will as thus defined? This much would seem to be certain: it involves intelligence and apart from intelligence it is unthinkable. For, it must be noted, the definition implies that the process of volition is a unitary process in which various experiences are united in one experience,

¹ *Outlines of Psychology*, section 32.

which is the determining condition of further experiences. And this unity is the essential feature of the fact. But this unity in the midst of the diversity is the work of intelligence. If the process is traced in detail, it will be seen that within any stage of the process there is operative that synthesizing principle which makes of the process an organic growth and prevents it from being only a discreet series of related but disconnected experiences. So will and intelligence are essentially synonymous terms; at least, there is no sense in speaking of will as if it had nothing whatever to do with intelligence. If you remove intelligence from will, that is, from organic experience, then without doubt you take from will the nerve of its power, you rob it of the element apart from which it simply ceases to be itself. This abstraction rends experience in twain, and mutilates its seamless garment.

Even will in the narrower sense, as voluntary conduct in distinction from automatic, reflex and habitual action, just as obviously involves conscious reflection and deliberation. And apart from such deliberation this sort of willing is non-existent. For an act of will so defined is always directed towards some end, it is ever for the purpose of accomplishing something or of removing some deficiency; it never leaps into the void. But in order that a purpose or an end may exist there must be functioning in experience that principle which we usually speak of as the principle of intelligence. Whenever an end or purpose is held

in view and conduct is directed in the light of it, reflection, conscious and more or less deliberate, is at work. The neglect of this evident fact, it may be remarked in passing, has not infrequently led to confusion in connection with the persistent problem of the freedom of the will. When once you have abstracted intelligence, and with it its ideals, from voluntary conduct, all that you have left is a conception emptied of all content. For will without thought is empty as well as blind.

The same vital interconnection between will and intelligence is seen when we turn our attention to the other side of the problem and ask concerning the *modus operandi* of thought. For we at once discover that there is no intellectual activity apart from volition, and that this is true whether you give to intelligence the narrower or broader definition. If you think of intelligence in the broader meaning, defining it, with the intellectualists, as that progressive synthesis of life which results in a unitary and organic experience, then you are giving the term the identical content which Külpe—and also Bergson, at least by implication—gives to the term volition. And so intelligence and will turn out to be nothing more than two names which designate one and the same reality. This, in my opinion, is the true interpretation of the matter, as I think has been shown above in the somewhat detailed discussion of the nature and function of intelligence. If this, then, be your conception of what intelligence really is,

you have not at all separated it from volition in the more comprehensive meaning of that term. On the contrary, you have really identified the two.

But if you give to intelligence a narrower definition, and think of it as synonymous with the process of abstract thought which is illustrated, for example, by a mathematical demonstration or by scientific thought generally, still the interconnectedness of intelligence and volition must be conceded. To have ideas, to deliberate for the purpose of solving problems—let those problems concern what they may—without at the same time and in the same act manifesting will is as impossible as it is to entertain a purpose or to act voluntarily without thought and reflection. To solve a mathematical problem or to cope with a scientific difficulty is as truly an act of will—is an act of will in precisely the same sense—as to climb a tree for the fruit it holds or fight a battle for the spoils of victory. Nor is the psychological justification of such an assertion difficult to state. Psychology tells us that reasoning, in the sense in which we are now using the term, is impossible unless there be some problem to be solved, some check or hindrance in the flow of experience to be removed. But, that a problem may be presented or a hindrance be experienced, consciousness must be purposeful, that is to say, conscious experience must possess that quality which we ordinarily describe by the term voluntary: it is absurd to say that experience is thwarted unless it be such that it can

be thwarted. "To be sure, a true scientific idea is a mental construction supposed to correspond with an outer object, or to imitate that object. But when we try to define the idea in itself as a conscious fact, our best means is to lay stress upon the sort of will, or active meaning, which any idea involves for the mind that forms the idea."¹ Even mathematical reflection, therefore, is an expression of will; all thought is voluntary; thinking and purposeful conduct refer to the same psychological fact.

We conclude, then, that between will and intelligence, however the terms may be defined, no absolute separation can legitimately be made. Our loose terminology has brought us into rather serious confusion here; popular psychology, that perennial source of so many insidious errors, has insisted upon an absolute difference where there is, strictly, at most only a difference in point of view. The one fundamental reality is consciousness active, consciousness dynamic and organic. Whether we call this reality will or whether we call it intelligence depends largely on what aspect of conscious experience we most desire to emphasize. Consciousness is, in truth, at once intellect and will; and to separate the voluntary from the intellectual aspect results in a vicious and—as the history of thought unmistakably shows—dangerous abstraction. As Hegel long since pointed out, and as many thinkers since his day have abundantly verified, "we must not imagine that man is

¹ Royce, *The World and the Individual*, I, p. 22.

on one side thinking and on another side willing, as though he had will in one pocket and thought in another. Such an idea is vain. The distinction between thought and will is only that between a theoretical and a practical relation. They are not two separate faculties. The will is a special way of thinking: it is thought translating itself into reality; it is the impulse of thought to give itself reality."¹ For my part, I can see no possible way of escape from this conclusion so long as we remain faithful to the facts of experience.

But when the separation between intelligence and will is denied, Bergson's disjunction, either a process that reproduces an eternally fixed and changeless plan or a process whose unity is only a *vis à tergo*, falls crumbling to the ground. The preceding discussion of the interrelation and inseparability of intelligence and volition discloses the possibility, nay, the necessity of another type of finality—a finality in which the creation of ends that control and direct the process is a basic feature of the process itself. The ground has now been cleared for an investigation of some of the details of this third point of view.

III

At this point in our discussion it is necessary to recall the conclusion which was reached in the preceding chapter. There our analysis disclosed the fact

¹ *Werke*, Bd. VIII, p. 33 (*Philosophy of Right*, trans., p. 11).

that conscious experience is teleological. It grows by reaching out into the future; in its development ends are always operative. Its growth cannot be explained, particularly if it is to be thought of as in any sense an organic whole, unless this forward-reaching characteristic of consciousness be taken account of. That we may explain the facts of experience, ends of some sort, either in the form of clear-cut and definitely defined purposes and aims or in the form of tendencies which, though at times subconscious, probably result ultimately from such purposes, must be seen to be working in and directing it. Apart from this kind of teleology there is no justification for saying that experience is a unity or that it is an organic whole: these words are without meaning when applied to an ateleological experience. This conclusion our previous consideration of the problem of duration has presumably established.

Accepting this conclusion, then, we may now note the fact that these ends which thus control in experience are dynamic, not static; fluidity is one of their essential qualities. Another fact to be noted is that they change according to law. And we notice, furthermore, that this change and the continuity within it are necessitated by the very nature of the ends themselves. Each of these points demands elaboration.

So far as individual experience is concerned, the fluidity of the ends functioning in it is fairly obvious. One need look no farther than oneself to discover an

illustration of the fact that the conscious experience of the individual consists largely in the acquisition and transformation of ends. The ideals of childhood are quite different from those that are potent in youth, while the ideals of youth are decidedly far removed from those which the full-grown man entertains; and the basic difference between these periods of life is to be defined largely in terms of the varying ideals. Even when maturity is reached the evolution of ends does not cease. To be sure, it is more marked in some individuals than it is in others; but it is present to some degree in all. New points of view are constantly being acquired, new aims and aspirations are becoming operative, new desires are entertained, and new habits formed. Thus throughout the life of the individual there is change, not only of particular states of consciousness, but also—and this is far more important for our present purposes—of the underlying tendencies that dig the channel in which the stream of conscious experience flows.

But transformation and change constitute only one side of the story. In the midst of the change there is constancy, in the midst of the transformation there is direction. The change is not haphazard and arbitrary; the new is never quite so absolutely new that it cannot claim some element of kinship with the old whence it springs. Consciousness may wander here and there in the wilderness of its environment, it may frequently hesitate puzzled concerning

the way it should take; but it always finds a way, and this way is discovered by the light of the experiences that have been instrumental in creating for consciousness its present directing and controlling ideals and impulses. And out of these ideals and impulses and the individual's reaction to their sway grow others, more or less of a kind, which shall serve consciousness in its later moments of indecision and hesitancy. As we have argued at length in the preceding chapter, every *present* of conscious experience possesses an ideal dimension and, by virtue of this fact, it is a constituent element within an organic whole, which is, in a very real sense, identical with itself throughout its evolution. Through all of his changing ideals the individual is the individual still.¹

In the evolution of consciousness writ large in human history the same fluidity of ideals is, perhaps, even more clearly manifest. It is seen in the con-

¹ The known facts concerning multiple personality do not vitiate the above conclusion. Even though it be true that within the same individual there frequently are more than one whole of experience which have no discoverable relation with one another, still it is equally true that within each 'whole' of experience there is a well-defined unity; though the several 'personalities' have no acquaintance among themselves, nevertheless each 'personality' possesses its unique characteristics, and its present is vitally bound up with its own past. In other words, each of the separate experiences is an individual in itself; to apply the term individual to the body possessing these several 'wholes' of experience is, strictly speaking, unjustifiable.

So far from its being true that these abnormal cases offer difficulties to the view suggested above, I should be inclined to argue that that view suggests the most satisfactory explanation of the facts. But this is another matter.

stantly changing scientific theories, the varying national ideals, the shifting moral standards, and the growing religious creeds. In the realm of science theory follows theory with such amazing rapidity that those who are unacquainted with the fundamental nature of the scientific method are prone to feel that there is nothing certain, and even to doubt the value of all scientific endeavor: the history of science is just a history of changing view-points. A nation, in one decade, is easily and quickly aroused to the pitch of frenzied enthusiasm over the prospect of war, while, in the next, it deprecates the very thought of war and will seek long and earnestly for a peaceful solution of its international differences. What one generation praises as the expression of the highest type of character the next places a very different evaluation upon, may, indeed, even condemn as wholly unworthy and vain. And in the history of religions what changes have not been evident?—it is only the record of the different conceptions that men have held concerning the nature of God and His relation to the world. And all of these variations are only outgrowths from the never-ceasing flow of the conscious experience of humanity, which entertains, and by its nature can entertain, nothing static. It is just through this fluidity of ideals that civilization advances.

But, as in the consciousness of the individual so in the consciousness of history, continuity is evident. However great a diversity among ideals the history

of humanity may disclose, still a thread of unity may be traced more or less clearly throughout the evolution. No scientific theory breaks with another so suddenly but that it springs from the same root which nourished the other. The national ideals of one generation are indissolubly linked with those of its forebears. From the lowest savage to the most highly civilized man, radical though the ethical differences between them surely are, there is, nevertheless, a golden thread of community of ideals; for, after all, it is not the feeling of obligation to one's brother that has changed, but rather the answer to the questions, Who is my brother? and What are my obligations to him?¹ Nor is it impossible to write a scientific history of the religions of the world; the several views of God and God's relation to man are not so hopelessly sundered that they cannot be compared and their relative values determined. In the last analysis, we must say that the historical evolution of mankind is the expression of one principle, that the multifarious ideals of this evolution are in a very important sense one. There is unity in the multiplicity, there is continuity in the flux of the civilization of man.²

Thus, both in the individual and in society, we find that conscious experience exhibits a process in which the controlling ideals are continuously changing. Whatever may be the nature of these ideals, whether

¹ Cf. Green, *Prolegomena to Ethics*, sections 206 ff.

² Cf. Perry, *The Moral Economy*, pp. 143-144.

they be what we ordinarily call ideals, that is, conscious and more or less clearly defined aims and purposes or whether they be habits, whether, again, they be ends which on the whole make for progress or for retrogression, they are in any event subject to constant revision and transformation. But they do not change in a lawless manner; there are no sudden breaks; order is present in the process. So much we have seen to be true. It now remains for us to inquire briefly why this should be so.

The fact of change among the directing ends is sufficiently accounted for by the fact that the will itself, whence these ends ultimately spring, is subject to change. The will is essentially dynamic; its very nature is to evolve. To be a willing being is necessary to a being that exists in time, because to have a will is to change, and existence in real time presupposes transformation and change. Now, as we have argued above, the ends that are involved in conscious experience are outgrowths of the will—*the rationalized will*, or intelligence. Ends, therefore, must change; they cannot do otherwise; if their source is changing, they, surely, cannot be static. As a matter of fact, if we speak accurately we must say the will and its ends are one and the same, since willing means nothing but teleological endeavor; therefore ideals are, as such, dynamic; it is impossible that they should be static. The nature of conscious experience, at any rate in so far as we human beings have conscious experience, is such, we must conclude, that

development is an essential feature of it. Volition, truly defined, and transformation are synonymous terms: will is nothing but a progressive embodiment of ends which are always, and necessarily, being subjected to redefinition and revision. In so far as consciousness entertains ideal meanings, that is to say, in so far as it is voluntary, it is *ipso facto* dynamic; and when it ceases to be dynamic it ceases to be a consciousness of ideals both in the case of the individual and in the case of society.

The unbroken continuity within this progressive embodiment of ends is due to what Wundt has called the *heterogeneity of ends*.¹ The individual always wills more than he is clearly conscious of; "the effects of the actions extend more or less widely beyond the original motives of volition." From these overflow effects an impetus is received which results in a revision and a readjustment of the original motives: the action, when done the second time, is different from what it was at first, because the accomplished results of the first act have issued in a changed point of view. The new ends are thus instrumental in redefining the old ends, the new ideas emerge from the old ideas, the new purposes subsume the old purposes; and so it is that the course of future experience grows out of the experience of the past. The new is always the output of the old, the old is ever expanding under the genial influence of the new. The old,

¹ Cf. *The Facts of the Moral Life*, pp. 329 ff.; *Outlines of Psychology*, translation of the 3rd edition, pp. 374 and following.

consequently, is never merely old, nor is the new ever wholly novel; rather, experience is a series of interacting ends, partly new and partly old, every stage of the series being, in the words of Wundt, "a necessary preparation for that which follows." Thus the development is a continuous and unbroken one, it is a chain of events, each of which breathes the life of all the others, all of which constitute a unique and indivisible whole. And if this is true of individual experience it would seem that we have sufficient grounds for asserting that it holds equally of the social consciousness.

Our conclusion, then, is that the ends operative in conscious experience are changing, and that this change is, in the nature of the case, necessary. Being constituted as we are, existing as we do within time, consciousness is for us essentially dynamic and can entertain nothing static. Even the ends that control conscious development are subject to change, since they are the expression of the fundamental fact of conscious experience, namely, volition. But, on the other hand, the changes that are involved in consciousness are not without their law. End acts upon end, ideal reacts upon ideal in such a manner that the new and the old are simply two aspects of one and the same experience. As Professor Baldwin insists: "It is characteristic of the organization of psychic stuff as such, to be progressive and selective; to have intentional meanings no less than accomplished meanings; to aim at something no less than to recognize

something; and these are the characters of the sort of meaning we call ideal. It is progressively embodied, but never completed, in the meaning already fulfilled. It selects and intends a fuller realization than that already accomplished. It sets up ends for attainment which are definite only so far as they embody insight beyond the present fact.”¹ To put the whole matter in a word, conscious experience is the progressive embodiment of ends according to the law of the heterogeneity of ends; and this progressive embodiment of ends consists in the revision, transformation, and creation of ends by the very process in which these ends direct and control.

We must insist, then, that it is simply contrary to fact to think of conscious experience either as growing towards a fixed and changeless goal or as expanding blindly from an original impetus. The concrete evolution of individual and racial consciousness exemplifies a process that is neither a creative evolution nor yet a radical and mechanical finalism. It exemplifies, rather, a process which I have ventured to call a *creative finalism* and which falls between these two extremes; it is a process in which the creation of ends proceeds *pari passu* with the evolution wherein they continuously exert their determining and directing influence. “Man does not stand outside his own growth and plan it. He becomes aware of its possibilities as he grows. . . . There is here on the one hand no distinction between the worker

¹ *Thought and Things*, Vol. I, pp. 236–237.

and his material. It is the material which does the work. On the other hand, the 'material' is not 'indifferent' to its destiny. It is out of human nature as it is that the conception of the ultimate purpose and destinies of man is evolved, and human nature being what it is, this purpose must appeal to it in the end with compelling force."¹

IV

So far, then, we have been brought to the conclusion that conscious experience, such as human beings know most intimately, is a process of creative finalism, that is, a process in which the directing ends are continuously defined as the process advances. These ends constitute the organizing principle of the process. They are essentially dynamic, since they are constitutive of a principle which itself is growing, namely, the will; they develop according to a determinate law, since the principle of which they are the constituent elements remains identical with itself throughout its evolution—it is the *rationalized will*. The question now before us is this: Shall we predicate of reality in general such a creative finalism; and, if so, what are the fundamental features of reality so defined?

Our answer to the first part of this question depends upon what attitude we decide to take with reference to the assumption which, at the beginning of the *Cre-*

¹ Hobhouse, *Mind in Evolution*, pp. 399-400.

ative Evolution, Bergson desires us to make. Is our conscious experience a privileged case in which we come face to face with real existence, and can we by analyzing our conscious experience directly disclose the fundamental nature of real existence in general? If we answer this question, as Bergson does, in the affirmative, then our preceding discussion would force us to say that reality is in very truth a process of creative finalism, that the universe is real in this sense of the term. If, on the other hand, an affirmative answer to the question does not seem warranted, then what we have said has no necessary implications so far as the problem of real existence is concerned; our discussion is, then, purely historical and psychological, and not metaphysical, in its bearings. Shall we or shall we not follow Bergson in this assumption?

For my own part, I am persuaded we must. To this extent at least we must be anthropomorphic in our philosophizing; otherwise we have no point of departure, no solid ground of reference. Certainly we must attach our theories to experience, or anything is possible and anything is true, since one man's imagination is worth just as much as that of any other; experience must be the touchstone of our metaphysical as of all our other hypotheses. And this necessity compels us to admit, to make the assumption if you please, that self-conscious existence is a privileged case in which we immediately touch reality; it is the only point of contact which we have

with the universe, and we must assume that its real nature is not foreign to the reality outside. As a matter of fact, we all make this assumption whether or not we are willing to admit it openly: every metaphysical hypothesis, idealistic or materialistic, finds its crucial problem in the fact of self-consciousness, and every hypothesis which cannot satisfactorily harmonize this fact with the rest of the world is regarded as in so far false. It is certainly more than questionable whether any serious thinker has ever freed himself from the assumption, and the explanation of its persistence is, apparently, that it is basic to reason itself; it is not easy to see how a single step in the direction of philosophical insight could be taken without it. Leibnitz is right: the microcosm is a reflection of the macrocosm; and we must believe that the picture which is revealed is faithful and trustworthy.¹

Assuming this, then, we conclude that in our previous analysis of conscious experience we have been dealing directly with reality itself. And we must further suppose that that analysis, if correct, has disclosed the basic characteristics of real existence. We are now to inquire what these are. Since they are implied in the detailed analysis of the previous

¹ To the reader who does not take the point of view here suggested I know not what further to say, save to request him to explain why the inveterate anthropomorphic tendency should hold us bound. However, even though the assumption is not granted, perhaps the discussion may have some interest as a statement of some of the characteristics which reality may possibly possess.

sections, it is necessary for us here only to set them forth in explicit form; and this can be done in little space.

V

In the first place, and most obviously, reality as creative finalism would define it is in time. The temporal process is a real process, and reality itself exists through and by means of the temporal series. Time is not limited to the merely phenomenal while the thing as it really is lies wholly outside temporal succession; it is within temporal succession and not elsewhere in some eternal and timeless sphere that reality is to be found. The real is temporal, and the temporal, real. On this point creative finalism agrees fully with creative evolution. Bergson is right here as opposed to Kant.

And from this characteristic of reality would follow as corollaries two other features which must be set in clear light. The first of these is that reality is dynamic, a process and not an accomplished fact. Its very nature is to grow, expand, change; being in time, it must be viewed as a process. This is obvious. Furthermore, in the second place, the process of reality is unending. It can never be completed and finished, for the evident reason that then it would cease to be of such a nature that time could be predicated of it. If reality is genuinely temporal, then reality is a process which by its very nature can never end. This, also, is obvious. So creative finalism,

in common with creative evolution, agrees with at least one aspect of the Heracleitean world-view: reality is an endless flux and nothing real is static.

For both creative finalism and creative evolution, then, reality is a process which creates, a transformation of the 'given' into something new. Both insist that reality grows, that it swells as it advances, and that the past lives in the present with compelling power; out of the past and into the open future plunges the stream of the universe, and what reality is to be is not predictable in terms of mathematical formulæ. For there is spontaneity here and original creation. So far creative finalism and creative evolution do not differ.

But in its conception of the nature of the process with which reality is to be identified creative finalism must diverge widely from creative evolution. For creative finalism the evolution of things is teleological. A process which is turned towards the impalpable void, which knows no leading and seeks no end, would, as creative finalism views the matter, be no process at all. Conscious experience is nothing if not teleological; and if conscious experience is to be regarded as an epitomized expression of reality, then certainly we are not justified in assuming that reality is other than teleological. And, be it explicitly stated, this teleology is an aspiration and not an impulsion only: reality follows a guide, and is not driven by a taskmaster. 'The fundamental reason why creative finalism feels obliged to insist upon

teleology is that it is wholly unable to account for the continuity of reality within time otherwise. Existence in time, as continuous and unitary, means, so far as finite consciousness is capable of speaking on the point, teleological endeavor and teleological endeavor alone; and if reality exists in time in an analogous manner it, too, must exist teleologically. Either time is unreal, not predictable of real existence, or real existence is a teleological process—such is the disjunction which creative finalism discovers to be exhaustive of the possibilities. On this point, then, creative finalism and creative evolution part company; and they must, since their faces are turned in contrary directions.

The difference between the two points of view may be further illustrated by a word concerning the problem of freedom. For creative evolution life is free in the sense that it is the expression of an original impetus which has somehow overcome all the obstacles that matter has placed in its way along the line leading to the human species; the original spontaneity of life, therefore, registers itself in man, and so man is free. "From our point of view, life appears in its entirety as an immense wave which, starting from a centre, spreads outwards, and which on almost the whole of its circumference is stopped and converted into oscillation: at one single point the obstacle has been forced, the impulsion has passed freely. It is this freedom that the human form registers. Everywhere but in man, consciousness has

had to come to a stand; in man alone it has kept on its way. Man, then, continues the vital movement indefinitely. . . ." ¹ Freedom, then, ultimately springs from this 'vital movement,' and man's continuation of it constitutes his spontaneity and originality. The important point, however, is that the 'vital movement' is nothing more than an 'impulsion'; man is only one of the 'currents' of the primitive unitary 'gust.' The only freedom man knows, therefore, is a freedom which inheres in the ocean of being whence he has sprung and which must be defined in terms of the original vital impulse that has created him. He is free because his future is open; and his future is 'open' because it has no obstacles to place in the way of the onrushing past. For creative finalism, however, freedom is a radically different conception; for it, freedom is not behind but before, not an original endowment but a progressive attainment. From this point of view, reality is an immense complex which knows no obstacles but its own multiplicity and whose essence consists in the progressive realization of the unity inherent in this multiplicity—wherein lies its freedom. Man is an element in this multiplicity and, like the whole of which he is a part, possesses the competency to make himself a harmonious rather than a discordant unity. This competency is *his* freedom. But be it noted freedom thus defined is in the future, not in the past;

¹ *Creative Evolution*, p. 266. See also the discussion on pages 247 and 339-341.

it is something yet to be and does not at present exist in all of its fullness. The future is open, to be sure, but its 'openness' lies just in the fact that it itself is the obstacle which the past must subdue. The difference between creative evolution and creative finalism, then, reduces to this: for the former freedom is most pronounced in the yesterdays of the temporal series, while for the latter freedom is to be found in the to-morrows; the one defines freedom mechanically, the other defines it teleologically.

It must be remembered, however, that a teleological process is not necessarily the reproduction of a clear-cut and static plan. And this brings us to another feature of reality as creative finalism would define it. The ends which control in its evolution are themselves dynamic; they spring from an evolution which is constantly subjecting them to redefinition and revision. The analogy here is not that of a workman who follows a plan mapped out for him by another; it is rather that of the artist who creates his own plan as he proceeds. The development of the universe is not to be thought of as merely the imitation of a model set for it, say, by some Absolute; it could not exist in real time if such were its nature. On the contrary, it produces its own 'model,' it defines and redefines and transforms its own leanings as it advances; in fact, its advance consists just in this progressive definition of its ends, and without this it would lose the very source of its dynamic nature. If conscious experience grows only by the revision

and transformation of the ends that guide it in its evolution, then we are compelled to maintain—certainly if we follow Bergson in his assumption—that reality grows in a similar manner. To be real, then, is to change, and to change in accordance with ends which themselves are changing.

But in the midst of this transformation of ends there is a law which guarantees that the evolution will not be chaotic. The development is not haphazard, nor is the process the result of chance variation. On the contrary, creative finalism would urge that there is within the expansion of reality a determinate principle of which the evolution is a continuous and inevitable expression. Even though the controlling ends issue from a principle which is essentially dynamic, still the principle is always its own creator and, in a very real sense, always remains identical with itself. There is here no distinction between that which is produced and that which produces, between the fashioner and its material; the material is itself its own fashioner, the process is itself its own creator. And thus it happens that everything which is created in the flux is the expression of one and the same principle. The development is orderly, not lawless.

And this suggests the last characteristic of reality which we shall here take space to mention, namely, that the process remains identical with itself throughout its unending way. As creative finalism views the matter, reality is not and cannot be a series of

disconnected states or stages; it is, rather, a one growth in which every present stage is an expression of all the preceding stages as well as, and at the same time, a constituent element in all the stages that are to follow. It is an organic development—a one continuous one, if we may be permitted to make use of the expressive Parmenidean phrase in a sense wholly foreign to its original meaning. Reality is a flux and yet it is static, it is Becoming and yet at the same time it is Being—thus would creative finalism harmonize the basic doctrine of the Eleatic with that of the philosopher of Ephesus. Throughout the process its own nature is functioning; from everlasting to everlasting it is itself.

To sum up, then, creative finalism views reality as an organic process which is through and through teleological. Its fundamental nature is to create ends, to produce tendencies, and to govern itself according to its own creations. These ends are progressively defined and revised with the advancing process in which they operate; they can never be finally and completely defined, and the process is, therefore, unending. Its homogeneous nature is necessitated by the fact that within it there is always an ideal dimension by means of which its past and future are inextricably involved in each other; this ideal dimension, the dynamic imagination, functions in the present and binds past, present and future into an organic whole. Though it can never be described as *just this* or *just now*, still it is always

identical with itself and possesses a determinate content. In short, it is such a process as *volitional-rational* beings know most intimately in their own living experience.

VI

That the conception of reality which we here venture to substitute for Bergson's creative evolution will escape adverse criticism is, of course, not to be expected. Undoubtedly there are difficulties involved in it which need clarification. This is not the place, however, to enter into a prolonged defense of the theory: to do so would take us far afield from the main purpose of the present study. But, since it has been necessary for us to give a statement of the theory in general outline, a few words in answer to the more obvious criticisms of it may not be amiss. Such a discussion may at least serve to set in clearer light the nature of the theory itself.

If I am not mistaken, two fundamental objections from two opposite points of view may be raised against our position. In the first place, it may be argued that the theory, if taken seriously, destroys the reality of time even while insisting upon it; for the view is too teleological to attribute to the temporal series any other than a merely phenomenal value. This is the objection which, probably, would commend itself to the Bergsonian school of critics. In the second place, it may be urged that the ontological value of time which the theory attempts to

defend is a common source whence issues a multitude of absurdities; for, on the one hand, it reduces reality to a *progressus ad infinitum* which the intellect simply refuses to contemplate, and, on the other, it fixes upon the struggling present a dead and irrevocable past the burden of whose weight is eternally increased. Such an accusation would undoubtedly be hurled against us from the camp of the 'tender-minded' idealists.

The objection of the critics of the Bergsonian temperament we have already answered in our preceding analysis of Bergson's discussion of the nature of finality. The reiteration necessitated by the consideration of it here may aid in the clarification of the issues involved. Unquestionably, there is a type of teleology which makes time unreal, the type, namely, which conceives of the world-process as the reproduction, and only the reproduction, of an eternally realized goal; for in such a condition of affairs the real is already attained, the cards are all in and the game is finished, and the temporal process is nothing more than a useless and impotent feint at playing the game. This we have already urged. But we have also pointed out that the teleology which creative finalism would posit is not of this type. The teleology of creative finalism is such that time is the *sine qua non* of its definition. We have insisted upon this in the preceding section of the present chapter, and it would be useless for us to repeat here what we have just said there. It is suf-

ficient to add in this connection that, upon the hypothesis of creative finalism, time is just as indispensable to reality as it is to conscious experience itself, and for the selfsame reason; the teleology of the former is the teleology of the latter. And if it be denied that conscious experience is teleological as creative finalism defines the term, then a question is raised which can be answered only on the basis of the facts of the case, and these facts, as we see them, are set forth in some detail above.

Turning, then, to the objections of the 'tender-minded' idealists, we begin with the contention that creative finalism reduces reality to nothing but an infinite progression. It must be admitted at the outset that any theory of reality which would support the absolute value of the temporal finds in this objection the test of its strength. If it cannot satisfactorily meet the objection, it stands in need of serious, probably drastic, revision. For any theory which would reduce reality to an infinite progression makes of reality a bare succession of attitudes, so to speak, a string of disconnected events; and this, as Hegel justly remarks, is to define reality as 'a wretched neither-one-thing-nor-another.'¹ The notion of an infinite progression is absurd, and any theory which makes of reality an absurdity thereby stultifies itself. Does creative finalism do this?

At first glance, every theory which seriously con-

¹ *Enc.*, section 94.

tends that time is predictable of reality seems open to this objection. If reality is changing—as must be the case if it is in time—then the conclusion is apparently inescapable that the real is not yet, that it is to be ever something other than it at any moment is, that, in short, the real *is* nothing. Predicate time of reality, and you find yourself in the midst of the difficulties which beset Fichte's theory; apparently you are immediately caught in the dizzy sweep of the infinite regress, with all of its attendant absurdities confronting you. But second thought will perhaps sober our judgment on this point. Whether or not our contention that time is real lands us in the dizzy whirl of the infinite regress depends entirely upon how we define the nature of the process of reality. If we think of it merely as an infinite series of adjustments on the part of an original impetus to an impalpable environment which if you once examine it closely turns out to be nothing, the several adjustments themselves being in consequence without law and order, undetermined from within the process and equally undetermined from without—if we conceive of reality after this fashion, then nothing can possibly save us from shipwreck in the whirlpools of the infinite progression: our fate is once for all sealed. Creative evolution undoubtedly spells our doom. Creative finalism, however, offers a way of escape: it is strong at the very point where creative evolution crumples and falls before the attack of the eternalist. Let us see how this is so.

The feature in which creative finalism differs most markedly from creative evolution is its insistence that reality is a system which is, as such, operative in every stage of its growth, and that the systematic character of reality is guaranteed by its teleological nature. To be sure, creative evolution makes the same claim, but, as we have already shown, it fails to justify the assertion. The reason why it fails, we may repeat, is because it leaves out of account the teleological aspect of the process upon which creative finalism lays the chief emphasis. From the point of view of the latter theory, every present is the expression of both the past and the future, and not merely of the past alone; the directing and controlling ideals, which are produced *pari passu* in the evolution itself, are organic outgrowths of the past and in them the past finds its constant redefinition and revision. The process of reality is thus a unity, and the nature of the unity functions throughout the process as a whole. Nor is this a mere assumption; it is rather the necessary implication of the fundamental characteristic of reality as creative finalism defines it. Because ends are operative in the development and because these ends ultimately spring from the past, the conclusion is inevitable that past, present and future are linked in indissoluble and vital unity. The whole contention of creative finalism against creative evolution is that the latter, by denying this forward-reaching aspect to reality and by excluding from it the binding force of organizing

ends, removes from it the only basis of fact upon which the claim that it is an organic whole can rest. Creative finalism escapes this defect by explicitly emphasizing this characteristic of the real, and by contending that teleology must be predictable of it.

Now, of such a theory of reality as this the objections against an infinite progression do not hold. For reality thus defined is not an infinite progression at all: it is radically different from a mere string or succession of events, its several stages do not bear to each other an external relation as beads on a cord. It is a cumulative, progressive expansion which is always identical with itself, but which never merely reproduces itself. This theory can legitimately say, therefore, admitting the ontological value of time, that the real is fully expressed at any moment of its history, provided it be remembered that no present can be accurately and fully described as a mere *now*. In this sense reality is always attained, is a complete realization of itself, and is not an impotent struggle to realize that which is ever yet to be but which, by its very nature, can never *be*. On the basis of this view, being and becoming are one and the same; that which is is in a very real sense that which is to be, because it itself is the source out of which that which is to be organically evolves. And this, we may safely urge, is a conception that is far removed from the dreaded *progressus ad infinitum*.

The second objection of the idealist stamp derives

its force from its moral leanings. And it may be subdivided into two phases. In the first place, our critics might insist that a world which is subject to eternal change is a precarious sort of world so far as our ethical ideals are concerned, since it remains an open question whether such a world bears in it any guarantee that these ideals possess ultimate significance. And, in the second place, they might urge against us that our philosophy is pessimistic, since it implies that the past with all of its errors is real in its own right and not subject to recall; what has been is eternally fixed, the realities of the various past moments of experience are unchangeably what they are. Can such objections as these be successfully maintained against creative finalism? I do not believe so.

The point of the first of these criticisms, we notice, is that creative finalism makes of the world-process a plaything of chance, that it offers no promise as to what direction the process will take at any moment of its evolution; it is, consequently, liable to shoot off at any angle and do violence to the ideals which the human heart cherishes. This criticism mistakes creative evolution for creative finalism: of the former it holds, but not of the latter. Creative evolution does leave the process of reality indeterminate; it can offer no guarantee as to what direction reality shall take, for the very simple reason that reality, as it conceives it, has no direction. But creative finalism insists that reality advances according to a

law which in general terms at least can be defined. The process, it urges, is the elaboration of a fundamental meaning, the expression of a principle, which, though itself dynamic, is constant throughout all of its changes. The course of reality, therefore, is never indeterminate, though not necessarily at any moment predictable—certainly not predictable in terms of mechanical categories. If, now, it can be shown that the chief spiritual interests of humanity are expressions of the same principle whence emerges the law of the growth of reality itself, these interests are not only safeguarded from violence but are also given lasting reality. And creative finalism believes that this can be shown to be true. The details of the argument cannot here be entered into; it is perhaps sufficient to recall what we have already argued at some length above, namely, that the organizing principle of reality is likewise the organizing principle of conscious experience. If this position is well taken, the criticism with which we are here dealing is obviously beside the issue. It is a criticism of creative evolution, not of creative finalism.

The second phase of the idealistic objection, that creative finalism implies that the dead past is, as such, irrevocably fixed and eternal, is a criticism which, if true, we must admit is fatal to our theory. A view of reality which involves this implication is a view which ought to be, and sooner or later will be, discarded. It is a view in which we cannot long rest content.

The Moving Finger writes; and, having writ,
Moves on: nor all thy Piety nor Wit
Shall lure it back to cancel half a Line,
Nor all thy Tears wash out a word of it.

“Surely, as an ultimate truth,” we agree with Bradley, “this is as abhorrent to our hearts as it should be false in our philosophy.”¹ But is this what creative finalism implies?

In order to answer this question we must recall what has been said about the organic nature of the evolution of reality which creative finalism posits. Every *present* of the process is an outgrowth of the past: the past is the soil out of which the present grows. Past and present are, thus, inextricably bound up with each other; to separate them in thought is to permit oneself to be caught in the clutches of a fatal abstraction. In some sense it is true that the present is always an expression of the past. This point we have already emphasized. But if this is true, then we cannot legitimately say that the past is a dead past and fixed beyond recall, hanging like a burdening weight upon the struggling present. On the contrary, the past is ever operative in the present; it is vital and potent there. From the point of view of creative finalism, then, what the moving finger writes is just the moving finger itself; the past is now just the process in which it exerts a determining influence: there is here no distinction between the agent and the material, between the process and its

¹ *Essays on Truth and Reality*, p. 250, note.

results. So, in answer to this criticism, creative finalism would say that the only past which possesses real existence is precisely the past which even now exists—the past which, just at this present moment, is expressing itself in the conduct of the present. The past is not dead: it is vital and vitalizing. It is not irrevocable and changeless: it is in constant process of revision and restatement.

Such, in very general outline, are the answers which creative finalism would give to the more obvious objections that may be raised against it. No effort has been made to state these answers in detail, nor has any great care been taken to suggest all of the possible objections to the theory. This is not the place to enter into either an elaborate statement or a detailed defense of the doctrine. The aim has rather been to present a summary defense of the theory against certain fundamental criticisms in the hope that, with new light shed upon the view from other angles, its broad outlines might be more clearly defined and its basic differences from the Bergsonian doctrine of creative evolution thrown into bolder relief.

CHAPTER VII

CONCLUSION

THERE are certain persistent problems of philosophy for which Bergsonism is supposed to offer easy and novel solutions. The programme presented to us, however, is, in its strictly orthodox form, incompetent to make these solutions intelligible or—if the use of this term seems to beg the question—understandable. Before Bergsonism can satisfactorily deal with these troublesome problems it must be revised in such a way as to bring it into harmony with a point of view which it at present insists upon regarding as an irreconcilable antagonist, namely, the point of view of intellectualism. Our study has presumably set forth the justification of this assertion. This concluding chapter is the appropriate place to bring together the results of our criticism and perhaps make it more pointed by showing just how Bergsonism fails to grapple successfully with some of these problems and by indicating wherein the Bergsonian method stands in need of revision in order to be able to square itself with the difficulties which such problems present. But before entering upon this undertaking it will be well for us to survey the course we have travelled and present in short compass the conclusions which have issued from our study.

I

We have seen that Bergson's epistemological views are confused, the confusion arising from two radically different conceptions of intelligence which play their part in his discussions. One of these views he consciously holds and explicitly emphasizes, while the other is only tacitly held and surreptitiously introduced into the argument as occasion demands.¹ We have also seen that the first of these views leads Bergson into all of the difficulties of subjectivism, robbing his intuition of practically all content and leaving it synonymous with an ultra-intellectual—if not ultra-experiential—and mysterious state of feeling which is buried so deep within consciousness that it has very great difficulty in expressing itself. The second view does give a content to intuition and relieves Bergsonism of the charge of being merely subjective; but, unfortunately for the novelty of the doctrine, this view has received a fairly definite and detailed statement in the development of post-Kantian epistemological theory.

This confusion in his epistemology inevitably leads Bergson into an uncertain definition of real existence.

¹ One is very strongly inclined to suspect that this confusion may ultimately be traced to Bergson's misreading of the history of modern science. On the one hand, when he speaks of science he is prone to think only of the mathematical physics of Galileo and Kepler, while at other times he apparently has in mind the method of contemporary science and its results. From the first point of view intelligence is cinematographical, but from the second standpoint it is seen to lose something of its spatializing tendency.

As he tries openly to define it, duration is neither conceivable nor actual. It is not conceivable, because its heterogeneity is chaotic; it is not actual, because the duration of the conscious experience of human beings does not exemplify it. The duration of concrete experience is inexplicable apart from the assumption of the systematic and organic nature of consciousness; and this, in turn, is inexplicable apart from the further assumption that consciousness possesses an ideal dimension which binds the past and the quickly passing present into a unity. Investigation discloses that this ideal dimension is there and must be defined in terms of teleological categories. Consciousness is actually essentially forward-reaching in its nature; though it grows out of the past, yet it penetrates the future and links past and future into a system which functions as a whole. It is the expression of *dynamic imagination* as well as dynamic memory. In so far as Bergson tends, when difficulties confront him, to fall back upon his second view of intelligence he assumes this teleological view of duration. But he never explicitly recognizes it, because he never openly avows the intellectualistic features of his intuition. But it may unhesitatingly be said that his failure to do so deprives his conception of duration, which is the basic and, one is inclined to add, the most original and suggestive conception of his philosophy, of its whole significance.

The error involved in his criticism of finality is

likewise epistemological in its origin. He assumes that if there be teleology within the world-process, then that process must consist solely in the reproduction of a fixed and static plan. And from this assumption he goes on to draw the conclusion that teleology can in no sense be predicated of reality, or at least that no sort of *finalism* can be predicated of it, and that, consequently, reality must be regarded as a process whose only claim to unity and continuity is that it issues from an original impulsion. But the assumption here made is unjustifiable; it implies a false view of the nature of intelligence, separating, as it does, intelligence and will to such an extent that they become virtually antagonistic principles. The absurdities of the conception of creative evolution, which in the last analysis must be defined as merely an infinite progression without a goal, may all be traced directly to this fatal abstraction. When we remove this deficiency from our analysis of conscious experience and clearly recognize that intelligence is dynamic, that, in other words, intelligence and will are only two terms which we use to refer to two sides of the same reality, we at once see that the abstract sort of teleology which Bergson so effectively criticizes and for which he substitutes his conception of creative evolution is replaced by a more concrete teleology, creative finalism, in which the controlling ends themselves exist and grow precisely in their own creation. This view of teleology provides for the reality of the temporal series in such a way that

the question, *How* is time real? is not an insoluble mystery. For it defines the evolution of reality in just those categories which conscious experience exemplifies and makes determinate—a claim which cannot successfully be made for the theory of creative evolution.

Such, in summary statement, are the conclusions to which our study of the Bergsonian philosophy has brought us. The reader must decide how far they seem to him to have been substantiated by the reasons advanced in support of them.

II

Turning our attention now to the problems which Bergson is assumed to have practically settled, we shall consider three of the oldest and most commanding. These are the problems of the reality of time, mechanism, and freedom. We begin with the problem of the temporal series.

Since the days when Heracleitus of Ephesus preached his ‘deep and dark’ doctrine that the essence of things is change, there have been some thinkers who have taken it upon themselves to espouse his cause and champion the view of an ‘open’ universe. To be sure, these thinkers have been in the minority among philosophers of recognized standing, but they have effectively supplemented the paucity of their numbers by the fervor of their zeal. In these latter days, the apostle of radical empiricism has earnestly endeavored to rid our minds of the

prejudice that a block-universe is either conceivable or desirable, and to lead us to confess the openness of the world. “*Refinement* is what characterizes our intellectualist philosophies. They exquisitely satisfy that craving for a refined object of contemplation which is so powerful an appetite of the mind. But I ask you in all seriousness to look abroad on this colossal universe of concrete facts, on their awful bewilderments, their surprises and cruelties, on the wildness which they show, and then to tell me whether ‘refined’ is the one inevitable descriptive adjective that springs to your lips.”¹ Confronted with such a challenge, only one answer seems possible for us—a flat and final negative. Surely our monistic world, simple, clean and noble, is not the world of real life. Surely “it is far less an account of this actual world than a clear addition built upon it, a classic sanctuary in which the rationalist fancy may take refuge from the intolerably confused and Gothic character which mere facts present. It is no *explanation* of our concrete universe, it is another thing altogether. . . .”²

But our absolutist training is hard to break: it has been long and thorough. We have learned it from Parmenides and the ancients, from Spinoza and the moderns. Our tradition is monistic through and through, and tradition is exceedingly conservative; the oneness and completeness of the world seems a

¹ James, *Pragmatism*, p. 22.

² *Ibid.*

matter of course. It is difficult for us to give up our 'refined' universe for one which is reputed to be "multitudinous beyond imagination, tangled, muddy, painful and perplexed." We hesitate to make the leap into such a vast and chaotic conception, lest we lose our way in hopeless and helpless confusion. Like the Greeks of old, we can scarcely conceive that such a Gothic affair is possible. Professor James did not succeed, in spite of his eloquence and impassioned appeal, in bringing us to the point where we were willing to give up unity and neatness for multiplicity and ugliness.

Just at the psychological moment, so it is supposed by his disciples, Bergson appears and relieves us of this harrowing uncertainty. He saves us from the calamity of turning our backs upon the suggestions presented for our consideration by the pluralists and of returning to the worship of our abstract and static One. With the *Creative Evolution* before us it is no longer possible to overlook the doctrine of the reality of the temporal series, the 'openness' of the universe, or to blink its significance. We are at length compelled to take it into serious consideration and to weigh our views in the light of it. At last, we are asked to believe, the call of Heracleitus rings truer than it formerly did. "The world into which our senses and our intellect introduce us lacks the fervour of real life, it is a cold world, a world of shadows. But if we learn to look at everything *sub specie durationis* coldness disappears, and consciousness and life take

their own place for us. New life is breathed into the world.”¹

For my part, I am more than willing to admit that there is an element of truth in this claim which the disciples make for the master. Certainly it is true that Bergson has insisted in season and out of season upon the ‘openness’ of the universe and its necessity for the real value of the temporal series. Take away this aspect of the universe, rob it of its evolutionary character, and you reduce it to the solid and pulseless cosmos in which Spinoza, for example, is commonly supposed to have asked us to believe. And this crushes the fervor out of life and deprives it of the joy of creative activity. It must be admitted, furthermore, that the emphasis which Bergson has laid upon this doctrine brings it emphatically to the fore in current thought. But Bergson has done little to make the conception which he emphasizes understandable. There is much assertion concerning it, but there is little of real argument and analysis. Whether we have in mind individual experience or universal reality, whether we are thinking of life as the ‘spark which disturbs our clod’ or as the all-inclusive cosmic impulse, the *élan vital*, we are equally at a loss to understand how the universe is ‘open,’ how time is predictable of life, unless we revise the Bergsonian conception of duration in such a way as to contaminate it with the despised intellectualistic elements.

¹ Ruhe, *Henri Bergson*, p. 241.

Take first the case of the individual. The experience of enduring in time, if by that is meant—as Bergson seems to mean—perduring through time as a series of connected and continuous instants and presents, is impossible unless in that experience the future is already somehow involved. For if there is any one thing obvious about the temporal aspect of human experience, surely it is that the time series in which this experience is and in terms of which its existence must be defined is partly future. I do not care to raise just here the question whether the future is real in the same sense in which the past is real, or to say anything for or against the ontological significance of change. The point before us is the simple and, as I suppose, obvious fact that, so far as finite conscious experience is concerned, duration does actually always involve a future reference. Take from human experience its aims and purposes and ambitions, its fears and hopes, and you have robbed it of those elements which contribute to it its unique, certainly its most significant, characteristics; but to speak of aims and purposes and ambitions, of hopes and fears, without reference to the future is to attempt the impossible and absurd. In the case of the individual, then, duration means existing out of the past through the present and into the future, and the future is as dynamic, that is, as really existent, in the present as is the past. This is the fact, whatever may be our explanation of it.

If, now, we are seriously to think of the cosmic

life as enduring after the analogy of human experience, then here, too, the future must be involved; from the point of view of such a cosmic life there must be aims and purposes and ambitions, hopes and fears, or something analogous to them in function, by means of which the future may be in organic and vitalizing contact with the present and the past. Either this is true, or the cosmic thrill, the cosmic impulse, call it what you will, is only a series of disconnected thrills; under any other conditions it is not, and cannot be, *in time* in the same sense in which human life is in time. Under any other conditions, the only 'openness' that could attach to the universe would have to be defined in terms of the impalpable void, and the creation predictable of it would be not liberty, but license. If the universe is open the future is real; and if the future is real it is even now dynamic in the present. Whatever may prove to be the difficulties which such a theory as this ultimately lands us in, the theory itself is unmistakably imposed upon us if we are going to contend seriously for the ontological value of time and seriously strive to make the conception something a bit more valuable than a mere assertion.

Our conclusion, then, is that duration in time necessarily implies the reality of the future—in the case of the individual, the reality of that individual's future; in the case of the universe, the reality of the universe's future. But this is a conception of duration which is very different from Bergson's, in that

it necessarily implies teleology: teleology smacks of intellectualism, and therefore Bergson repudiates it. However, apart from teleology—so much still seems true—it is hopeless to attempt to support the doctrine of the ontological value of an open universe.

And yet, if one were to interpose here the objection that Bergson does admit a sort of teleology in duration and that, consequently, the criticism which has just been advanced is not wholly justified, I should not think it worth while to dispute with him. From one point of view it may unquestionably be argued that Bergson does admit the importance of teleology in the life process. But he does so grudgingly, implicitly, and inconsistently with his persistent, outspoken and uncompromising antagonism to all sorts of teleology. His implicit recognition of teleology in duration is the rankest heterodoxy, and he doubtless would be very loth to plead guilty to the charge. So the objection only calls our attention once more to our author's basic inconsistency in his discussion of the problem, an inconsistency which we have repeatedly met with. All that I wish to say in connection with the present instance of it is to reiterate and emphasize the fact that such a tacit admission drives Bergson straight into the intellectualist camp. For as soon as he admits the teleological nature of duration—whether the teleology in question be abstract and external or inner and organic makes no difference in the present premises—he appeals to those principles of organization and

co-ordination which intellectualists long since discovered and made use of. On the basis of this interpretation of Bergsonism—an interpretation which, I am willing to admit, one has grounds for arguing is in harmony with the spirit of it—Bergson and Thomas Hill Green have little to quarrel over save the question as to whether or not time is to be given ontological significance.

So, it would seem, we are driven to the assertion that Bergson must either go farther in the direction suggested by his statement that true intuitionism is true intellectualism, that is, renounce almost everything he has explicitly said concerning the epistemological problem, or acknowledge that his basic doctrine is logically excluded from his premises. He has said much about the reality of time, the ultimate significance of change, the basic necessity of an open universe; but he has done little to explain how such things can be. To make this doctrine meaningful he must explicitly recognize what he frequently implicitly assumes, namely, that intuition is not ultra-intellectual in the sense of *non-intellectual*. Doubtless the intellectualists would soon become used to his presence in their midst, even if at first they should be inclined to receive him with some show of surprise. Ultimately they might be disposed to regard him as a worthy ally; for, viewing the matter as one who sees through intellectualist eyes, I seem to discern elements in Bergsonism which intellectualism neglects—if it does—to its own hurt.

III

Mechanism has long been a potent tendency in thought. The Greeks, to be sure, were not much interested in it; the influence of Democritus seems not to have been very extensive, having been counteracted no doubt by the influence of the greater Plato. And the thinkers of the Middle Ages were too submerged in theological prejudices to feel the fascination of the mechanistic hypothesis. But after the time when Descartes insisted that the ordinary activities of life can be explained in wholly mechanistic terms, that the animal is only an animated machine, the theory of mechanism steadily gained ground. The publication of Darwin's *Origin of Species* added a tremendous impetus to its development and seemed to establish beyond the possibility of a question the fact that life ultimately issues from the inorganic and must be finally explained in terms of it. The recent development of physiological theory has added strength to the view by attacking the strongholds of vitalism. Life and matter have been brought closer together, nervous activity has revealed ever greater similarity to physical and chemical processes, mind has seemed ever more dependent on brain, until physiology has appeared to be on the verge of disappearing into 'bio-physics' and 'bio-chemistry' and psychology into neurology. Every step in advance in the study of organic matter and of mind has seemed to make for the support of the mechanistic contention.

The result of this development has been to produce much uneasiness in the minds of many who, for moral or other reasons, were reluctant to accept mechanism as a final theory of the world. Much was at stake—and all seemed to be in danger of being lost. The question of Tennyson expressed a universal problem:

And he, shall he,
Man, her last work, who seemed so fair,
Such splendid purpose in his eyes,
Who roll'd the psalm to wintry skies,
Who built him fanes of fruitless prayer,

Who trusted God was love indeed
And love creation's final law—
Tho Nature, red in tooth and claw
With ravine, shrieked against his creed—

Who loved, who suffered countless ills,
Who battled for the True, the Just,
Be blown about the desert dust,
Or seal'd within the iron hills?

And the answer to this question was in doubt. The heart of man would have it No, but mechanism would have it an emphatic and unequivocal Yes. And the tragedy of it was that reason and science apparently placed the weight of their authority on the side of mechanism.

Bergson is supposed to have said something of extreme importance on this question, and to have finally settled the vexed controversy against the claims of the mechanistic hypothesis. He has in-

voked the 'Vital Impetus' to save human experience from the clutches of mechanism. Matter is to be explained ultimately in terms of life, not life in terms of matter; matter is nothing but the 'detension' of the 'tension' of life, the spatialization of the original non-spatial stream. "Let us imagine a vessel full of steam at a high pressure, and here and there in its sides a crack through which the steam is escaping in a jet. The steam thrown into the air is nearly all condensed into little drops which fall back, and this condensation and this fall represent simply the loss of something, an interruption, a deficit. But a small part of the jet of steam subsists, uncondensed, for some seconds; it is making an effort to raise the drops which are falling; it succeeds at most in retarding their fall. So, from an immense reservoir of life, jets must be gushing out unceasingly, of which each, falling back, is a world." To be sure, this simile does not exactly represent the relation between life and matter; for the jet of steam and the forming of the drops by its condensation are determined, whereas the creation of a world is a free act. "Let us think rather of an action like that of raising the arm; then let us suppose that the arm, left to itself, falls back, and yet that there subsists in it, striving to raise it up again, something of the will that animates it. In this image of a *creative action which unmakes itself* we have already a more exact representation of matter."¹ This shows that mechanism as an onto-

¹ *Creative Evolution*, pp. 247-248.

logical theory is deficient; for mechanism attempts the impossible task of explaining life in terms of something which is only the reverse movement of life.

If one inquires how we know all of this, where we get our information concerning the 'vital impetus' and its relation to matter, the reply is that one may discover the truth of it by simply placing oneself at the point of view of intuition; see intuitively, and the inadequacy of mechanism is immediately and axiomatically revealed. If, however, some persistent Socrates asks just what is meant by *seeing intuitively*, and how such insight shows us a way of escape from the mechanistic hypothesis, the situation at once becomes confused. If we take intuition in the sense in which Bergson seems most anxious to have us take it, that is, as equivalent to a faculty of consciousness by means of which we somehow leap directly into the heart of things and feel the thrill of the vital impetus, then the assertion that life transcends the intellect and is the object only of intuition is equivalent to the assertion that vital phenomena are of such a nature that they cannot be comprehended in terms of categories, that is, cannot be explained; for intuition, as Bergson is most anxious to have us think of it, is non-intellectual and would seem to be utterly incompetent to frame categories. The disjunction which first confronts us, therefore, in our Socratic quest is: either life is beyond all categories, that is, not definable, or it is subject to the categories of

mechanism. But this situation into which we are thus forced is, to say the least that can in justice be said concerning it, unfortunate. For it reduces us to the desperate necessity of accepting mechanism as our philosophy of life or of admitting that these phenomena are understandable only through a faculty which is sunk so deep in subjectivity that it is hopelessly without power ever to voice its findings. But this gives mechanism an unfair advantage; so far from overthrowing the mechanistic philosophy, it insures to it an easy victory. Once we are forced into such a dilemma as this, mechanism will surely prove to be the easier way of escape for the majority of us. Only a comparatively few amongst us are able to break with the mental habits which have been forged by more than two thousand years of discipline; and then, too, many are doubtless inclined to feel that it is better to be a slave even to mechanism than to dwell securely in the tents of the unutterable.

In point of fact, however, Bergson does not leave us to such a forlorn choice. By his second conception of intuition—which, though inconsistent with practically everything he explicitly avows concerning the nature of knowledge, we must say is the really significant part of his epistemology—he offers us another and a more agreeable alternative. And that is the suggestion that there remain to the intellect categories outside of the mechanical realm, and that therefore life may be made intelligible and even dealt

with scientifically without being forced into the static molds of the mechanical sciences. Here Bergson does say something on the problem that is really worth while, something that strikes at the heart of the mechanistic philosophy. But it takes him unawares, and leads him once again straight into the midst of the despised intellectualists. On sober reflection, however, even Bergson himself must confess that it is better to keep company with publicans and sinners, and even if need be submit to the embarrassment of their ostentatious welcome, than to remain fast in the clutches of a deadening mechanism or speechless in the dreamy impotence of a blind and ineffable intuition. And, when one considers the matter thoroughly, it really seems that these three possibilities exhaust the range of choice.

Thus it happens that in his attacks on mechanism Bergson makes use of the weapons which the intellectualists have furnished to his hand. Despite his persistent criticism of intellectualism, he is at last compelled to make her an ally in his onslaughts against the mechanistic stronghold. And without her assistance he would have fought a losing battle. It is the principles which intellectualists from Hegel on have discovered that Bergson makes use of to strike his enemy a deadly blow. I have here no thought of censuring him for having appropriated these intellectualist weapons. My complaint is rather that he fails explicitly to acknowledge the aid which the intellectualist has rendered him.

IV

Bergson is supposed, once again, to have thrown a flood of light on the problem of freedom. His conception of a creative evolution, a freedom which creates, somehow magically solves this age-old problem for us. "It must be clear," says Carr, "that when we approach the problem of freedom from this standpoint, the standpoint of a reality that is essentially, ultimately and originally a change that is undetermined, and whose determination is brought about by the action that its process involves, there must arise an entirely new notion of the nature of freedom and of what constitutes free action."¹ Our curiosity concerning what this new notion of freedom may be is supposed to be satisfied when we are informed that, according to the standpoint of the philosophy of change, "In really free actions we are compelled, but the compulsion we feel is within us; we are called on to act with our whole nature and our whole nature responds."² And this is evidently reminiscent of various assertions of Bergson himself to the effect that our conduct involves 'the whole

¹ *The Philosophy of Change*, p. 202. I wish to take this occasion to record my appreciation of the force and clarity with which the author of this work presents his conception of Bergsonism. It may be argued that he presents only one side—and that the better side—of the new philosophy; I rather think this is true. But certainly his discussion is the clearest and most suggestive application of Bergsonian principles I have seen.

² Carr, *ibid.*, p. 204.

of our person' and it is with the whole 'bent of our souls' that we will and act.

But such a solution of the problem only serves to raise further questions in our minds and pique our curiosity. What is to be understood by such expressions as 'our whole nature,' the 'bent of our souls,' the 'whole of our person'? The mere invocation of such occult phrases as these certainly does not dispose of the problem; the terms used in the solution stand in need of considerable explication. Of course, Bergson does have a great deal to say about them; rather, I should say he makes repeated demands upon them and forces them to do service in various passages where he happens to be concerned with any phase of the problem of free will. But nowhere, so far as I have been able to discover, does he vouchsafe to us a very clear insight into their meaning. The problem which they involve is, obviously, the problem of duration itself, and they have attaching to them all of the darkness and ambiguity of that conception. This ambiguity we have already considered at some length above. On the basis of that discussion, we must here assert that the Bergsonian doctrine of freedom, a free activity which creates, is either only a new form of the old doctrine of freedom of indifference or substantially identical with a very orthodox doctrine of freedom, which, in principle at least, dates from Plato's *Republic*. And which it is depends upon what interpretation one is pleased to place upon the notion of duration.

If duration implies a process which springs from the 'swelling' of the past and issues in the totally new, if there is in it no trace of teleology save that which arises from the fact that it is the manifestation of an original and directionless 'impulse,' then the freedom whch characterizes the process is nothing more than a 'freedom of indifference.'¹ But this sort of freedom is as incapable of being understood in theory as it is dangerous in practice. A process which is creatively active after this fashion is wholly chaotic, purely capricious and arbitrary, and not an evolution at all. Bergson himself recognizes the justice of this criticism, and he is at pains explicitly to repudiate this view of freedom: "To behave according to caprice is to oscillate mechanically between two or more ready-made alternatives and at length to settle on one of them; it is no real maturing of an internal state, no real evolution. . . ."² We must assume, therefore, that in his discussion of freedom Bergson really has in mind the other conception of duration and the notion of freedom which it implies.

But if existence in duration is so defined as to rid it of its arbitrary and capricious nature, the notion of freedom with which we then are dealing is certainly

¹ Of course, by placing the emphasis here upon the function of the past, by insisting that the act springs wholly out of the past into the vacuity of the present, one might easily and—as I hope to show below—logically convert this Bergsonian doctrine of freedom into the grossest determinism.

² *Creative Evolution*, p. 47.

not in any sense novel. For now teleology enters in, and freedom must forthwith be defined in terms of ends. But this definition of freedom is, in substance at least, almost as old as the beginning of Greek philosophy itself; it is just the freedom which characterizes the man of justice described in the fourth book of the *Republic* who, "having gained the mastery over himself, will so regulate his own character as to be on good terms with himself." Certainly it is a view of freedom which modern intellectualists have all along been particularly interested in emphasizing. Deprive the notion of creative activity of its blind and arbitrary nature, make it mean what it must mean if it expresses the complete fact, namely, that in the nature of the individual there are ends and purposes, desires and ideals, in a word, motives, which play their part in the *modus operandi* of conduct, and then proceed to define freedom by reference to these motives, emphasizing at the same time the source whence they spring—do this, and, if I am not under a misapprehension, you will have epitomized at least one basic feature of the doctrine of freedom preached in the first chapter of the second book of Green's *Prolegomena to Ethics*.

Thus, once more, Bergson finds himself keeping company with the gentlemen of the opposition. And be it insisted, he must cultivate such associations if he would give to his conception of creative freedom a meaning which differentiates it from the freedom of arbitrary choice. The dilemma is plain: either

your creative evolution is a process involving ends or it is a process whose dynamic is only the past. In the latter event, the only freedom which could possibly be predicated of the process is a freedom of indifference—unless, indeed, the push from behind should perchance be overwhelming enough to make impossible even such a vacuous form of novelty as Bergson insists upon. In the former event, freedom is defined in purely intellectualistic terms. And from this dilemma there seems to me to be no escape.

Of course, there is a metaphysical as well as a psychological side to the problem of freedom. And in the case of Bergson's theory the metaphysical aspect is of tremendous importance. The human will is supposed to get its 'push' from the cosmic impulse, the *élan vital*, spoken of in the preceding section. But if there is confusion in Bergson's discussion of the psychological side of the problem, there is chaos here. No effort is made to state clearly the relation between the Vital Impulse, in capitals, and the will of the finite individual except in terms of such metaphors as those of the jet of steam or the weary hand falling even while it is rising. Indeed, the matter is passed over so lightly that one is inclined to suspect the author recognizes no problem at all.

But, unless I am wholly mistaken, just here is one basic difficulty in Bergson's metaphysics. Just how are we to conceive the relation which exists between the finite individual and the life of the world? For

this question Bergson has no answer. All the light he vouchsafes is contained in such esoteric statements as: "A beneficent fluid bathes us, whence we draw the very force to labor and to live. From this ocean of life, in which we are immersed, we are continually drawing something, and we feel that our being . . . has been formed therein by a kind of local concentration."¹ "In reality, life is a movement, materiality is the inverse movement, and each of these two movements is simple, the matter which forms a world being an undivided flux, and undivided also the life that runs through it, cutting out in it living beings all along its track."² "From our point of view, life appears in its entirety as an immense wave which, starting from a centre, spreads outwards, and which on almost the whole of its circumference is stopped and converted into oscillation: at one single point the obstacle has been forced, the impulsion has passed freely. It is this freedom that the human form registers. Everywhere but in man, consciousness has had to come to a stand; in man alone it has kept on its way. Man, then, continues the vital movement indefinitely. . . . *It is as if a vague and formless being, whom we may call, as we will, man or superman, had sought to realize himself, and had succeeded only by abandoning a part of himself on the way.* The losses are represented by the rest of the animal world, and even by the vegetable world, at least in what

¹ *Creative Evolution*, p. 191.

² *Ibid.*, p. 249.

these have that is positive and above the accidents of evolution.”¹ But such statements as these do not answer our question; they only serve to increase our perplexity. How does the beneficent fluid ‘bathe’ us, and just what is the ‘kind of concentration’ which forms in the ‘ocean’ of life? What sense is there in asserting that the simple movement of life, ‘running’ through matter, ‘cuts out’ living beings along its track? Just what is meant by the ‘wave’ of life, or consciousness, ‘keeping on its way’ in man, and just how does he ‘continue’ the vital movement? In what manner does the human form ‘register’ the freedom of the original ‘impulsion,’ and what sort of ‘freedom’ is it which is thus registered? These, one would think, are very pertinent questions; certainly they must be answered before the uninitiated can fathom the significance of such dark utterances. But, of course, all of our difficulties here doubtless arise from the fact that we are permitting our intellect to blur our vision; these problems are problems only for intelligence. Presumably from the point of view of intuition the meaning of such statements is patent and the truth of them axiomatic.

Neglecting, however, those who are fortunate enough to be possessed of this easy insight, and fixing attention upon the rest of mankind who are compelled to depend upon the more prosaic method of rational reflection, one cannot but feel that this Bergsonian

¹ *Creative Evolution*, p. 266.

solution of the problem of freedom will be to many a stone of stumbling. If man is merely a continuation of the vital impulsion, if the human will is nothing but a broken fragment of the original movement, and if, furthermore, human freedom is identical with the freedom which must be predicated of the original movement, then *human* freedom is a delusion. At any rate, the individual is free only in a very modified sense—in the same sense, for example, in which the modes of the attributes of Spinoza's Substance are free. For from this point of view the individual is just the result of a push, the effect of an explosion; and the push and explosion are not from within, but from without. What freedom attaches to his action, therefore, is not *his* freedom; it is only the freedom of the source whence he comes. The theory here presented to us is in substance pantheism; and there is no more room in it for real individual freedom than there is in any pantheistic system. The beneficent fluid which bathes us and ' whence we draw the very force to labor and live ' threatens to engulf us; the living beings, both human and non-human, which the movement of life cuts out along its track turn out to be nothing but marionettes. It is therefore well said that the human form *registers* the freedom of the original impulsion; it is certainly not easy to see how it can be said to do anything more. If Bergson's doctrine of the vital impetus be taken seriously, then, and pushed to its logical conclusion, we are forced to admit that the

only freedom there is in the universe is the freedom of the vital impulse itself. So far from solving the problem of human freedom, this doctrine destroys even the possibility of that freedom; there is nothing for the individual but slavery, determination *ab extra*. He is even deprived of the joy which the Spinozistic type of pantheism guarantees him, the joy, namely, of comprehending his situation and acquiescing in it.

It is perhaps possible to redefine this conception of the vital impetus in such a way as to render its relation to human experience intelligible and at the same time make provision in it for real individual freedom. This revision would have to be carried out along the lines suggested above in the many criticisms of the notion of duration and that of creative activity. But this would necessitate the introduction of teleological features into the doctrine, and thus would lead us again into the intellectualist's premises. However, if the choice is between intellectualism, or, for that matter, any intelligible theory, and mechanical determinism, the issue will not remain long in doubt for many of us.

V

It has been hinted above that there are elements in Bergson's philosophy which intellectualism can ill afford to neglect. This is not the place to enter upon an exhaustive discussion of such a suggestion, but perhaps a word in this concluding section for

the purpose of putting the matter explicitly will not be amiss.

The fundamental thesis of the Bergsonian metaphysics is, of course, the reality of time. The nature of existence can be defined only in terms of duration: to exist is to change, and to change is to endure; time, thus, is the stuff out of which reality is made. To be sure, Bergson does not make this conception of duration intelligible to us; in his writings one searches in vain for a satisfactory account of the notion; and if one makes of it something more definite than a poetical figure of speech, one must revise it in such a way as to render it a very different conception from that which the author of the new philosophy apparently has in mind. At any rate, the conception is wholly without meaning and is incompetent to explain the facts from which it is said to emerge unless a very definite form of teleology is introduced into its definition; and, when this is done, the conception becomes one which Bergson, so far as one can follow him, would not be willing to accept. This has been developed in the foregoing pages, and I have no intention to repeat those arguments here. Nevertheless, in spite of Bergson's unsatisfactory statement of his theory, I cannot but believe that it contains an element of truth which no sound philosophy can overlook. The conception of duration is a conception which, when made intelligible, intellectualist philosophy must incorporate into itself or it will lead us ultimately into intellectual bankruptcy.

For if reality is such that duration is not predicable of it, it is difficult to see how the temporal order can, as such, be of any ultimate significance.

Bergson, in common with other anti-intellectualists, assumes that intellectualism and temporalism are inherently inconsistent theories, that if one holds to the premises of intellectualism one must perforce espouse the conclusions of eternalism. The intellect, they contend, inevitably saddles us with a block-universe and leads us into a dead and static absolutism; and they may claim that the history of intellectualism itself is a sufficient justification of their contention. Practically all of the intellectualists, they may point out, have been eternalists. Plato was an intellectualist and his universe was a block-universe—a universe which was finished, perfect and complete, a sort of “marble temple shining on a hill;” like Parmenides before him, he regarded time as an illusion and change as a mere matter of ‘opinion.’ The same charge, they may say, can be brought against the moderns—Spinoza, Kant, Hegel, and the neo-Hegelians. I do not wish to raise here the question whether such a charge is justifiable in detail. Whether it is or whether it is not, it must presumably be admitted that intellectualism and eternalism have been frequently found together in the history of thought; it may even have to be admitted that eternalists have without exception been intellectualists. I am not now interested in the truth of such contentions. What I should rather emphasize is that

other exponents of essentially the same position. But such a conclusion as this does not seem to me to be necessarily implied in intellectualism; that is to say, the non-reality of the temporal series is not forced upon us by virtue of the fact that we contend that the real is subject to the categories of intelligence. For it is not obvious that a spiritual Power, which is not above change, may not nevertheless be above chance; nor is it plain that the temporal order must of necessity be present as a *totum simul* in some Absolute Experience before it can be said to be intelligibly predicable of reality. I cannot here enter further into this point; let the assertion suffice that reality must be temporal in its essence, that its temporality must be so defined as to render comprehensible to intelligence the genuine significance of our spiritual interests, and that such a conception of reality is possible only on the basis of the intellectualistic premises.

For my part, I must confess myself unable to see how it can legitimately be denied that intellectualism logically involves some form of temporalism—and by 'temporalism' I mean the doctrine that time is genuinely predicable of reality. For it certainly is not easy to understand how it would be possible for the universe to meet the demands of intelligence, if the universe were in its essence static and pulseless and rigid. If intelligence demands anything of the universe at all, it would seem to demand that there be room enough there for its teleological categories

to bud and grow. Surely there is no necessary inconsistency between an intelligible universe and a temporal universe: in so far as Bergson and the anti-intellectualist propagandists generally assume the contrary, they really assume the main point at issue. Nor, on the other hand, are we driven to the conclusion that a reality of which time is predicable is *ipso facto* subject to blind and irresponsible chance. A growing and changing reality, notwithstanding the fact that it is dynamic, may nevertheless be systematic: in so far as intellectualists tend to deny that such is conceivable, they apparently base their contention upon the assumptions of that type of intellectualism which they themselves not only admit, but insist, is out-grown. The principles of true intellectualism seem to me to be no more consistent with a sterile absolutism than they are with an erratic creative evolution: they rather demand of the real that it be a process—a process in which ends are potent, and in which these ends are themselves dynamic and evolving.

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